

**EVIDENCE BASED MOTIVATIONAL INTERVIEWING TRAINING
FOR A PRIMARY CARE PRACTICE**

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By

Andrea C. Fukuhara

Committee:

Chen-Yen Wang, Chairperson

Cheryl Albright

Hermína H. Taylor

Dedication

Mom and Dad, for all the sacrifices you made so I could have this education.

Thank you

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Abstract

Healthcare delivery is rapidly evolving, as healthcare organizations are moving from a pay-per procedure system, towards a value based culture that focuses on quality, safety, patient experiences and outcomes. Research has shown that employee engagement and satisfaction, patient satisfaction, and patient outcomes are symbiotically interdependent, and increasing employee engagement and satisfaction is a proactive way of increasing patient satisfaction. The purpose of this Doctorate of Nursing Practice (DNP) project was to provide Motivational Interviewing (MI) training to employees of a primary practice setting to increase employee and patient engagement. The Iowa Model of Evidence Based Practice by Titler et al. (2001) was used to guide this practice change. From the evidence gathered through a literature synthesis, MI can be learned through brief interventions, and its use has been shown to produce positive outcomes with patient engagement and lifestyle behaviors. MI training was provided to seven employees of a primary care center through two modes: A two-part self paced computer module and an interactive patient simulation seminar. Likert scale surveys were used for pre and post-intervention data, and an open ended/short answer survey was used to gather data 2-weeks post intervention. Data was analyzed through the use of average score comparisons, individual response trends, and qualitatively, with the use of the short/open answer responses. Results showed an increase of use, acceptance, and value of MI, and also showed that brief educational interventions can help to increase the knowledge and use of MI, which has the potential to have a collective positive impact on the population of patients who receive care at this clinic. The materials and methods can be applied to similar primary care centers within the organization, and a summary of the findings was disseminated to the DNP project stakeholders.

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List of Abbreviations

AACN- American Association of Colleges of Nursing

BECCI- Behavior Change Counseling Index

BMI- Body Mass Index

CDC- Centers for Disease Control and Prevention

CINAHL- Cumulative Index to Nursing and Allied Health Literature

CITI- Collaborative Institutional Training Initiative

CMS- Centers for Medicare and Medicaid Services

CPC+- Comprehensive Primary Care Plus

DNP- Doctor of Nursing Practice

EBP- Evidence Based Practice

ED- Emergency Department

HCAHPS- Hospital Consumer Assessment of Healthcare Providers and Systems

HEDIS- Healthcare Effectiveness Data and Information Set

JCAHO- Joint Commission on Accreditation of Health Care Organizations

MA- Medical Assistant

MD- Medical Doctor/ Physician

MI- Motivational Interviewing

MIKAT- Motivational Interviewing Knowledge and Attitudes Test

MINT- Motivational Interviewing Network of Trainers

PSR- Patient Service Representative

QCIPN- Queens Clinically Integrated Physician Network

QHCC HK- Queens Health Care Center of Hawaii Kai

RCT-Randomized Controlled Trial

RN- Registered Nurse

SBRIT- Screening Brief Intervention, Referral to Treatment

SMART- Specific, Measurable, Achievable, Time-Limited

Chapter 1. Executive Summary

Introduction

The delivery of healthcare is rapidly changing, and third party reimbursement is shifting from a pay per procedure culture towards a value-based culture that focuses on standards of quality, safety, patient experiences and patient outcomes (Lowe, 2012; Sherwood, 2013). Employee engagement has become a strategic goal for many healthcare organizations, as employee engagement plays a crucial role in facilitating the quality of patient experiences and their outcomes (Lowe, 2012). This Doctor of Nursing Practice (DNP) project focused providing Motivational Interviewing training to employees of a primary care setting to initiate its use in practice, to increase patient experiences.

Background/problem. Problem focused triggers that have been identified within this primary care practice include below satisfactory scores in workforce engagement on the most recent 2006 Press Ganey Employee Voice Survey results. Research has shown that four elements, employee satisfaction, employee engagement, patient experiences, and patient outcomes, are interdependent; thus, a decrease in one component can potentially have adverse effects on the other three elements (Ang, Bartram, McNeil, Sandra, & Stanton, 2013).

Conceptual framework. The model of conceptual framework that was used to guide this practice change was the Iowa Model of Evidence Based Practice, described by Titler et al., (2001). This model consists of seven steps that guide the evidence based practice change through problem identification, team formation assembling and critiquing the literature, developing the EBP standard, implementation, evaluation and dissemination.

Literature review & synthesis. An electronic literature search was conducted using Google Scholar, PubMed and CINAHL to assemble the literature. Some of the search terms that

were used in conjunction with boolean operating terms included “motivational interviewing,” “self-efficacy,” “behavior change,” “adult”, and “motivation.” A total of 15 articles met the literature specifications, and were critiqued and used to guide the practice change.

Innovation/objectives. Much of the research has documented success in teaching MI in a short period of time to healthcare workers, and set the framework for the practice change objectives. The objectives for this practice change is to introduce and provide education on Motivational Interviewing to the employees of a primary practice setting to increase their knowledge, perceived value and attitudes towards MI and also to initiate its use into daily practice in order to increase the quality of patient experiences.

Methods

Rogers, (2003) Diffusion of Innovation theory, and the Framework Featuring Steps and Standards for Program Evaluation by Milstein, Wetterhall & CDC (2002) was used to guide the development of the practice change and evaluation program.

Design. The EBP implementation was integrated through three stages. The first stage was noted as the assessment phase, which determined the employee’s attitudes and knowledge towards MI and use in daily practice. The second phase focused on the introduction and education of MI, which was delivered through two different ways. The first way was through a series of two self-study interactive computer modules, and the second way was delivered through an interactive group learning simulation seminar. The third phase focused on evaluating the intervention and determining if there were any changes from the baseline data collected in the assessment phase through use of a post-intervention survey, and a two-week post intervention survey.

Setting & sample. The practice change took place at the Queens Healthcare Center of Hawaii Kai, an outpatient, (non-urgent care) primary care practice, located in East Oahu. The target population for this project was all of the employees within the primary practice setting, which included the front office staff/patient service representatives, the medical assistants, registered nurses and the physicians.

Evaluation. A self-report baseline, post-intervention survey, and two-week post-intervention survey was created to evaluate the practice change. The baseline and post-intervention surveys were designed as Likert scale surveys, and the two-week post intervention survey was a short answer style survey. These evaluation methods were used to determine if there were any changes in the knowledge and acceptance of MI from before the intervention, to afterwards.

Results

Following the intervention, there was an overall increase in the understanding of MI, an increase in understanding its clinical implications and also an increase in the use of MI. Through the comparison of pre and post-intervention scores an increase was also found in the belief that MI will increase the quality of patient experiences, patient rapport, job satisfaction and career fulfillment. In addition to the results, the overall increase of use in MI has demonstrated that there had been an acceptance of adopting the use of MI into daily practices.

Discussion

Consistent with previous research, a little teaching can go a long way, and MI can be easily taught and learned through brief interventions. As seen from our results, short educational interventions can increase the knowledge, attitudes and adoption of MI into daily practice, which can collectively have a positive impact on the population of patients that receive care at this

clinic. A summary of the findings was disseminated to the organizational stakeholders, and will be used to qualify the organization for further quality improvement funding grants. The materials and methods used to carry out this intervention can also be applied to similar primary care centers within the organization to teach MI.

Chapter 2. Problem

Introduction

Health care is embracing a paradigm shift in the delivery of care. Over the past several years, care has been focused on delivering comprehensive quality care to patients, recognizing the important link between employee engagement, patient and patient outcomes (Barid, 2014; Centers for Medicare and Medicaid [CMS], 2016; Lowe, 2012). This Doctor of Nursing Practice (DNP) project will focus on addressing ways to assist a health care organization with increasing employee engagement; a proactive way to increase patient experiences, patient satisfaction, and patient outcomes. This chapter will review the background and problem of the importance of employee engagement and satisfaction, describe the literature search, literature critique and synthesis, and recommended practice changes based on the presented evidence.

Background/Problem

Quality care and patient experience. The delivery of health care is rapidly changing. Within the past decade, new health care models are being introduced to meet the rising complex and intricate needs of patients with chronic disease (CMS, 2016). In the health care industry, insurance payment is steadily shifting from a pay for procedure culture towards a value-based culture, in which payment transformation relies on standards of quality, safety, patient experiences and patient outcomes (Lowe, 2012; Sherwood, 2013).

The Hospital Consumer Assessment of Healthcare Providers and Systems, also known as HCAHPS, is a national standardized survey that publicly reports patient's perspectives on the quality of care received during a hospital stay (Centers for Medicare and Medicaid Services [CMS], 2009). The standardization of perspectives and the public reporting of these results has re-shaped the delivery of care in several different ways (CMS, 2009). HCAHPS provides

validated, standardized results, and has allowed for even comparisons of quality between hospitals across the state, and the country (CMS, 2009). Public reporting of these results also increased the transparency of hospitals and the quality of care they provided, which increased accountability and created an incentive for these places to improve the quality of care provided to gain public investment (CMS, 2009).

Since October 2012, HCAHPS scores have been used to calculate third party payouts in the Hospital Value-Based Purchasing program (Larson, 2012). As a result of this, hospitals have become more proactive in ensuring that patients have a positive hospital experience (Larson, 2012). Patient satisfaction and positive patient experiences are now of high priority for all health care organizations (Baird, 2014).

Employee satisfaction and engagement. The health care industry is portrayed as an extremely people-centric industry, where the successful delivery of treatments, procedures, and education are heavily reliant on people/employees (Peltier, Dahl, & Mullhern, 2009). Since healthcare employees are involved with every aspect of patient care, they are key factors that contribute to the quality of a patient's experience (Baird, 2014; Press Ganey Associates, 2016). Job satisfaction is important in healthcare organizations, and is needed to produce optimal work, participate in active decision-making and effective communication, and plays a crucial part in collective problem solving (Bhatnagar & Srivastava, 2012).

Employees are key assets in healthcare when they are emotionally connected to the work they do, and feel a sense of pride and personal fulfillment in the work they accomplish (Press Ganey Associates, 2016). In a 2006 Press Ganey Employee Voice Survey, the Queens Health Care Centers Hawaii Kai Clinic (QHCCHK) was rated a level three, on a Press Ganey 2016 Employee Voice Survey. The Press Ganey Employee Voice Survey measures work level

engagement via three tier levels: 1,2 and 3 that are based on a group of questions related to key drivers of workforce engagement. Among the key drivers several factors are included: career development opportunities, tools and resources provided to help (the employee) provide the best care for their patients, high quality care and service, leadership and respect among co-workers. Tier 3 is an indicator of the lowest scores related to the key drivers of workforce engagement, and requires attention to be given in areas of improving managerial support, human resources support, and additional investments in training (Press Ganey Associates, 2016).

The relationship between quality care, patient satisfaction and employee satisfaction.

Employee satisfaction is a topic that has received much attention from clinic managers, researchers, and human resource specialists. The interest to understand employee satisfaction is due to its direct link with patient satisfaction (Bhatnagar & Sirvastava, 2012). The goal of every health care organization is to offer the highest quality health care services possible, and achieving this requires a workforce that is committed (Bhatnagar & Sirvastava, 2012). Quality care, patient satisfaction and employee satisfaction are all interdependent upon one another, and work efficiency relies heavily on employee morale (Peltier et al., 2009). Poor job satisfaction and poor workforce engagement results in increased job turnover, which adversely affects workflow and patient care (Bhatnagar & Sirvastava, 2012). Job satisfaction is crucial to cultivate motivation, productivity and work fulfillment, which decrease the potential for high job turnover, contributing to a higher quality of patient care and satisfaction (Bhatnagar & Sirvastava, 2012).

Employee satisfaction is also linked to quality care through psychological empowerment, which can be defined through four cognitions; meaning (work goal values), competence (a belief that the individual holds in which they are able to carry out job requirements), self-determination

(control or autonomy of the work process), and impact (being able to influence patient outcomes) (Ang et al., 2013). With the use of these four types of cognition, employees can actively adjust their actions, behaviors or attitudes to provide more meaningful patient care (Ang et al., 2013). Employees who experience psychological empowerment while at work are more satisfied with their job and feel more committed to their work, which leads to higher levels of performance. In healthcare, this higher level of performance is equivalent to the delivery of high quality patient care and higher patient satisfaction scores (Ang et al., 2013).

Healthcare employees are key factors that contribute to the quality of a patient's experience. Employee engagement and satisfaction have a momentous impact on work quality and productivity, and are a fundamental building block that drives patient experiences, that eventually lead to better health outcomes (Baird, 2014; Peltier et al., 2009; Press Ganey Associates, 2016). In summary, the problem-focused trigger that has been identified is the sub-optimal Press Ganey employee work engagement scores. The purpose of this DNP project was provide the employees of this clinic with a career enrichment opportunity to learn new techniques to make a positive impact on patient visits which is a proactive way of simultaneously increasing employee engagement and job satisfaction.

Conceptual framework

The conceptual framework model that guided this project was the Iowa Model of Evidence-Based Practice (EBP) To Promote Quality Care, from Titler, et al, (2001), shown in Figure 1. The Iowa model guides the stages of decision making through the transformation of evidence-based knowledge into practice to solve clinical problems (Titler et al., 2001). There are seven steps in this model: 1) identification of a problem, 2) forming a team, 3) assemble the

relevant literature 4) critique and synthesize the evidence, 5) develop an EBP standard, 6), implementation and 7) evaluation (Titler et al., 2001).

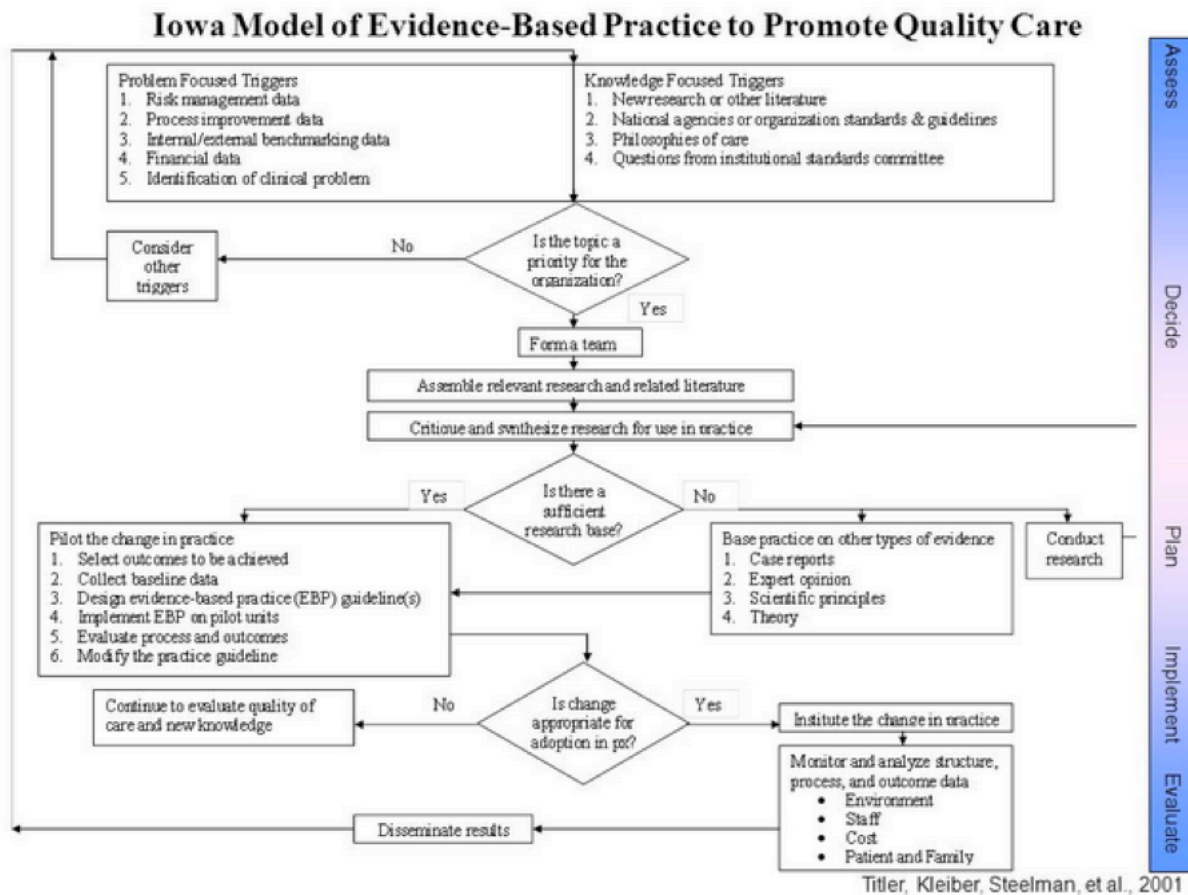


Figure 1. The Iowa Model of Evidence-Based Practice (Titler et al., 2001)

Problem identification. The first step in the Iowa Model was to identify a problem/trigger that initiated the need for a change to occur (Titler et al., 2001). These triggers may be problem-focused triggers, or knowledge focused triggers. The problem focused triggers that have been identified for this project was the low employee engagement scores from the Press Ganey employee voice survey and the absence of resources and career development opportunities to learn about new tools and resources to help employees deliver high-quality care.

Once a problem and need for change was identified, the priority of the topic was determined by how well it fit in relation to the goals of the organization (Titler et al., 2001). Determining the priority of the topic is important, as it is related to how much time others are willing to invest in the project (Titler et al., 2001). Ensuring employee engagement, positive patient experiences and positive patient outcomes are a high priority to the Queens Health Systems organization, and is their mission is to provide high-quality healthcare services to its patients (Queens Health Systems, 2017). Providing quality care is not only a priority to Queens, but is also a benchmark that must be met by several national governing bodies such as CMS and the Joint Commission on Accreditation of Health Care Organizations (JCAHO) (Jha & Epstein, 2009).

Team formation. The second step in the Iowa Model was to form a team. The formation of a team was utilized for the development, implementation, and evaluation of the EBP change (Titler et al., 2001). Stakeholders are essential to ensure sustainability of a practice change and to make sure the practice change remains within the organization's priorities (Horev & Babad, 2005). Individuals were strategically selected to maximize the potential of stakeholder buy-in, and team members that were identified included clinic and organizational administrators, managers, directors, and the medical director.

Assembling the relevant literature. Once a team was formed, the third step was to assemble the relevant research and literature (Titler et al., 2001).

Literature search. The use of MI has been highly supported in a variety of healthcare settings, where it was first created for use in behavioral therapy and addiction (Miller & Rose, 2009). Over the years, it has been pioneered in other areas of healthcare and yielded positive outcomes for a variation of health topics such as cardiovascular rehabilitation, hypertension,

diabetes, diet and lifestyle changes, infection risk reduction and other chronic diseases (Miller & Rose, 2009). The search for publications was based on an initial clinical question that sought to determine the effectiveness that MI has on behavior changes that are related to obesity and other modifiable risk factors that are commonly seen in primary care settings.

Literature sources and criteria. An electronic literature search consisted of database searches through PubMed, Google Scholar, and Cumulative Index to Nursing and Allied Health Literature (CINAHL). The search terms “motivational interviewing,” “self-efficacy,” “behavior change,” “adult,” and “motivation” were combined with Boolean operators. The Boolean operator NOT was used in conjunction with “substance abuse,” “addiction,” “alcohol,” and “drug” to obtain articles relevant to behavior change topics that are commonly presented in a primary care setting. Search terms were combined, alternative terms were used, and various combinations of search terms and Boolean operator terms were used to yield articles that were relevant to determining how MI impacts behavior changes related to chronic disease. Filters that were used included studies that only used adult subjects, and published within the past 10 years. Studies were included in the literature synthesis if they used Motivational Interviewing (MI) as a part of an intervention to elicit a behavior change in patients associated with common modifiable risk factors that are addressed in a primary care setting such as weight loss, healthy eating behavior, physical activity or self-efficacy. References listed from quality articles were also used to identify other relevant literature.

Literature Critique. Once the literature search was conducted, the next step in the Iowa model was to critique the literature (Titler et al., 2001). This step is critical in determining the strength of evidence that will guide the practice (Titler et al., 2001). Electronic search results yielded 64 articles that were preliminarily skimmed through, and 15 articles were selected to be

included in the synthesis. The articles were critiqued using Mosby's Research Critique Form (2004). The studies that were reviewed provided strong, reliable, and high-quality evidence.

The literature was ranked and grouped according to the seven stages of Melnyk's hierarchy of evidence shown in Figure 2. (Melnyk & Fineout-Overholt, 2011). Three studies were grouped into level I evidence, four studies were randomized controlled trials; level II evidence, two studies were controlled trials with no randomization; level III evidence, two were case-controlled and cohort studies; level IV evidence; two articles were systematic reviews of descriptive and qualitative studies; level V evidence, one study was a qualitative study; Level VI evidence, and one study was a case scenario design; level VII evidence. Figure 3 shows the number of articles that were reviewed and grouped in each category of evidence (Melnyk & Fineout-Overholt, 2011).

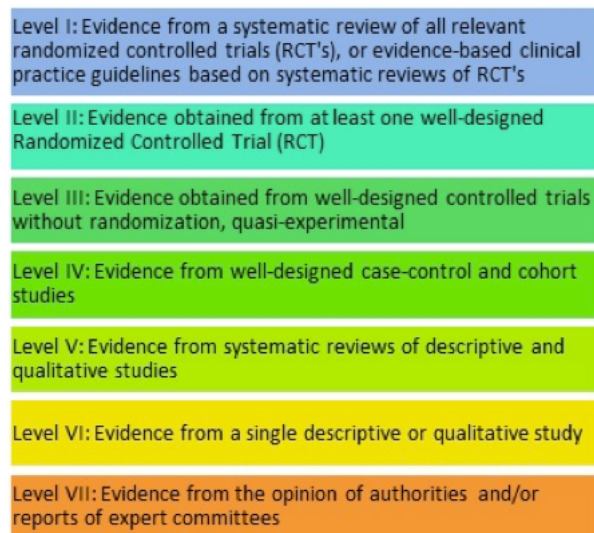


Figure 2. Melnyk's Hierarchy of Evidence (2011)

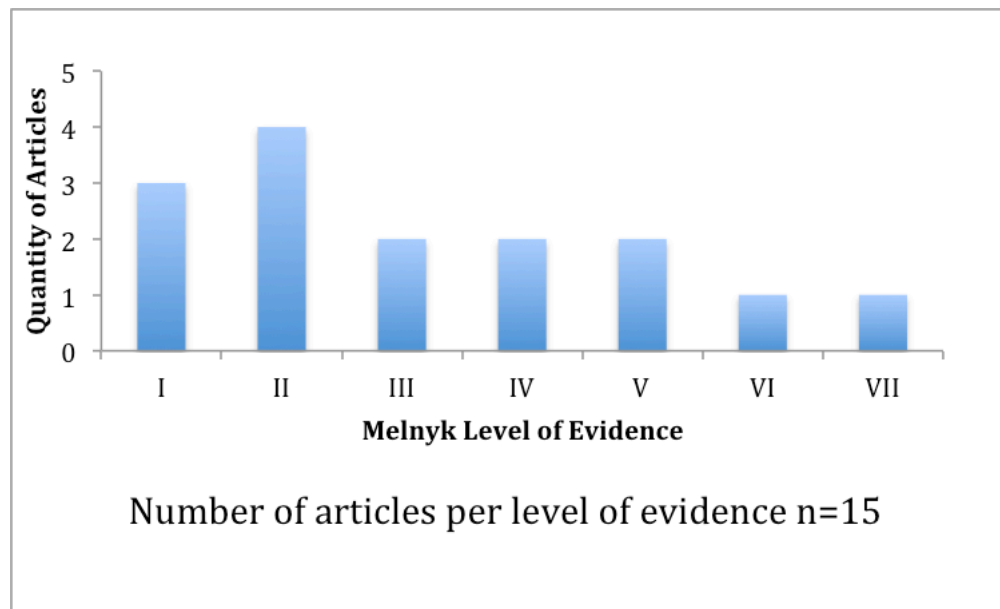


Figure 3. Number of articles per level of evidence

Evidence synthesis. After grading the evidence, the evidence was synthesized and grouped into three subtopics that included teaching Motivational Interviewing, the impact Motivational Interviewing had on biometrics, and how Motivational Interviewing works with different patients in various stages of readiness to change. These three subtopics are further discussed below.

Biometrics. MI was originally developed to help patients with addiction problems and substance abuse, but has been established in many other healthcare disciplines such as obesity, diabetes, hypertension and lifestyles that contribute to these chronic diseases (Spollen et al., 2010 Level II). The literature synthesized here provides information about the effectiveness that the use of MI has on preventable disease risk factors such as weight, body mass index (BMI), cholesterol, glucose serum levels, and daily exercise.

Barnes & Ivezaj (2015) and Lundahl et al., (2013) found MI to have mixed results for certain biometric outcomes. In a systematic review conducted by Lundahl et al., (2013), 10

studies concluded MI had significant reduction impacts on BMI, but found MI was not helpful in improving blood glucose levels and healthy eating habits. A systematic review was also conducted by Barnes & Ivezaj (2015) and determined MI did not have any significant impacts on hemoglobin A1C levels. Similar to Lundahl et al. (2013), Barnes & Ivezaj (2015) also found mixed biometric results. Three out of the 15 studies in these systematic reviews found that the use of MI had significant improvements with blood pressure, and only one out of three studies found that patients had significant weight loss. Overall, these two systematic reviews concluded despite some of the mixed results in BMI and body weight, MI will still have an overall contribution of helping patients become more motivated to become involved with their healthcare (Barnes & Ivezaj, 2015, Level I, Lundahl et al., 2013, Level I).

Hardcastle et al., (2012) and Hardcastle et al., (2013) conducted studies on the effects that MI had on walking and physical activity. Hardcastle et al., (2013) conducted a RCT and compared two different groups. The intervention group received standard exercise and nutrition education along with five sessions of brief MI education, and the control group received just standard exercise and nutrition education (Hardcastle et al., 2013, Level II). Physical activity levels, walking, fruit and vegetable intake, and a few other biometric data was taken at baseline, six months and 18 months (Hardcastle et al., 2013, Level II). The results of the study concluded that the use of MI was effective in promoting some positive health outcomes such as an increase in walking and decreases in cholesterol levels (Hardcastle et al., 2013, Level II). Hardcastle et al., (2012) conducted a prospective study that was aimed at determining the success that MI has on physical activity levels. Participants were recruited and given one on one personalized MI sessions. Self-reported physical activity was taken at baseline and at six months, and the study found a significant increase not only in self-reported physical activity but an improvement in

self-efficacy as well. Findings from these two studies both justify the benefit that MI has in increasing walking and physical activity levels (Hardcastle et al., 2013, Level II; Hardcastle et al., 2012, Level IV).

A RCT by Ruggiero et al. (2014) identified the impact that medical assistants have on patients when they are coached in MI and other behavioral change counseling techniques. In this RCT, one group of medical assistants received training in diabetes self-management, and several behavioral change counseling techniques that included MI, and the other group of medical assistants receives just the diabetes self-management training (Ruggiero et al., 2014, Level III). The results of this study discovered that when the Medical Assistants delivered the diabetes self-care coaching along with the behavioral change counseling techniques, the patient had a significant increase in their self-efficacy compared to the other group (Ruggiero et al., 2014, Level III).

The studies done by Barnes & Ivezaj, (2015), Hardcastle et al., (2012), Hardcastle et al., (2013), Lundahl, et al., (2013), Ruggiero et al., (2014) and Tuccerco et al., (2016) determined the use of MI helped patients improve some biometric health markers such as weight, blood pressure, BMI and cholesterol. While these studies established improvements, a study done by Flint et al., (2016) observed that the use of MI can also be used to maintain a patient's improvement in health status. In a longitudinal study, employees at a university received wellness services that used MI counseling to improve employees' current health status (Flint et al., 2016, Level IV). Biometrics such as cardio-respiratory fitness, strength, BMI, percent body fat, cholesterol, and blood pressure were taken at baseline and every year for four years (Flint et al., 2016, Level IV). The wellness service improved the health of staff who were considered to have "at risk health profiles" for the first year after baseline, and also showed the sustainment of

these improvements at the remaining annual four-year follow-up sessions (Flint et al., 2016 Level IV).

Teaching Motivational Interviewing. Increasing rapport between healthcare employees and patients are vital for improving the clinical experience of patients. Providing education on how to approach and initiate behavior change conversations and having patients become engaged in these types of conversations is vital for improving not only their clinical experiences, but patients overall health outcomes as well (Spollen et al., 2010, Level II). Several publications have determined the effective impact that a brief Motivational Interviewing counseling intervention can have on providers and office staff in learning this conversational technique.

Edwards et al., (2015) and Spollen et al. (2010) conducted studies to determine if MI can be taught through brief interventions. Spollen et al., 2010, used a two-hour behavioral change-counseling workshop that included didactic instruction and role-playing that was led by a health care professional trained in MI, and Edwards et al., (2015) a conducted a 6-hour workshop using group simulated patient encounters as a mode to teach MI. Both studies used the Behavioral Change Counseling Index (BECCI) to measure provider behavior change counseling and adaptation of MI skills pre and post intervention, and concluded that the brief MI and behavior change counseling interventions increased provider's knowledge of behavior change, confidence in using MI, and also had significant positive impacts on MI and behavior change counseling skills (Edwards et al., 2015, Level III).

Pollack et al. (2015) conducted a randomized controlled trial (RCT) to determine the effect of a MI teaching intervention to a primary care practice and pediatric office. Similar to Edwards et al., (2015), and Spollen et al., (2010), Pollak et al., (2015) also conducted a brief MI training session (1 hour, followed by monthly follow-up meetings), and found an increase in

clinician self-reported MI skills and confidence in using MI. Additionally, the study found that 100% of the providers stated they would utilize the newly learned MI skills in their practice (Pollack et al., 2015, Level II). Pollak et al., (2015) also identified an unanticipated benefit to the intervention, which was an increased sense of team cohesiveness with the providers and office staff.

The literature recommendations from this section show that a brief educational intervention on the basic fundamentals of MI and behavior change counseling significantly impacts a provider's knowledge and skill on these communication styles and techniques (Edwards, et al, 2015, Level III; Pollack et al., 2015, Level II; Spollen et al., 2010, Level II,).

Stages of change. A patient's readiness to change can be described as a continuum that spans from no consideration towards making a change, to making a change. The counseling and conversation style of MI allows its users to work with a patient's current stage of change and their willingness to change to help them improve their health (Noordman, DeVet, Vander Weijden, & VanDulmen, 2013, Level IV). A patient's readiness and willingness to change is an essential component of MI, especially when patients are considering a lifestyle change. Hibbard & Greene, (2013) conducted a review of articles that involved "patient activation" (defined as a patient's willingness and capacity to initiate behavior to manage their health; a specific concept that falls under the broader concept of patient engagement) and its contribution to engaging patients in their healthcare. A focal point among the findings of this review focused on how patient activation and patient engagement could be increased when treatment plans, education, and counseling is tailored to the patient's stage of change (Hibbard & Greene, 2013 Level IV). Hibbard & Greene, (2013) further concluded that the more activated or engaged a patient is, the more likely they are to adhere to their treatment and maintain high levels of self-efficacy.

Patient's readiness and willingness to commit to a lifestyle change are essential components for the application of MI. A study done by Noordman et al., (2013) examined how well nurses were able to adapt and apply MI to different patients whom all had varying stages of change. In this study, Noordman et al., (2013) used recorded consultations between nurses and patients to collect data information. An analysis was done to determine the patient's stage of change, and how the nurses tailored their communication style to what they believed the patient's stage of change was to engage the patient to take a more active role in their healthcare planning. The study concluded that the nurses were able to intuitively assess a patient's readiness to change and adapt MI accordingly (Noordman et al., 2013 Level VI). These two studies done by Noordman et al., (2013), and Hibbard & Greene, (2013), have recommended that tailoring behavioral change counseling to the person's stage of change (which is what MI does) is an effective way to engage patients and help them become more active in their care.

Summary of the literature review and synthesis.

Several articles explored the effectiveness of brief MI training, teaching or education to providers and office staff (Pollak et al., 2015; Spollen et al., 2010; Edwards et al., 2015; VanBuskirk & Wetherell, 2014). All articles were consistent with their conclusions that MI can be effectively taught with minimal training and brief teaching interventions, and improves provider confidence, knowledge and skill in behavior change counseling. In addition, MI also has the potential to increase team cohesiveness among the employees in a clinic (VanBuskirk & Wetherell, 2014).

Along with teaching/training providers on MI, it is also vital to consider how well MI can be applied to patients with varying attitudes about their health and healthcare. Evidence regarding the use of "stage/readiness to change" all supported the fundamental of modifying

treatment and goal setting to meet patients where they are in terms of their stage of change to further engage patients in their healthcare (Hibbard & Greene, 2013, Level V; Noordman et al., 2013, Level VI). An important outcome that was identified in the work by Noordman et al., (2013) was that modifying treatment and goal setting to meet the patients where they are at in terms of their stage of change is much preferred over the traditional treatment approach of empirical advice giving.

There were overall mixed results regarding the outcomes of MI on biometrics, but the literature recommendations point towards MI being overall helpful for providers when it came to initiating conversations that dealt with making behavioral changes for a better health (Barnes & Ivezaj, 2015, Level I; Hardcastle et al., 2012, Level II; Hardcastle et al., 2013, Level IV; Lundahl et al., 2013, Level I.). An important conclusion to make among all of the evidence findings is that on a small scale, MI was determined to be helpful in a few practice settings, but on a larger scale, if applied in all primary practice settings, has the potential to collectively enhance the health of many people, and minimize associated health related consequences.

Strengths and limitations. There were some limitations to consider in the review of the literature. In the two systematic reviews that compared a MI intervention to usual care, (Barnes & Ivezaj, 2015, Lundahl, et al., 2013,), usual care was not well defined, and difficult to tell what exact type of usual care the intervention was being compared to.

A few gaps in literature search were also identified. All of the studies concluded the benefits of MI and how MI can be easily taught to health care professionals, but there were no articles that actually compared different MI training interventions to determine the best way to train and educate providers. The modes of delivery that were used for training and education

included a mixture of lectures, scenarios, electronic self- study materials and coaching provided by MI trainers.

Formation of an EBP standard. Once sufficient evidence was determined, the next step in the Iowa Model was to formulate an EBP standard (Titler et al., 2001).

As recommended from the literature, MI has many vital implications for use in practice and can be learned from brief educational interventions as indicated by work from Spollen et al., 2010, Lundahl et al., 2013, Barnes & Ivezaj, 2015, Hardcastle et al., 2013, and Hardcastle et al., 2012. Based on the evidence, recommendations for the practice change included using brief MI training sessions delivered through a mixture of delivery modes. Table 1 shows the literature recommendation for each component of the practice change followed by the DNP project design.

Table 1.

Literature recommendation and its influence on the DNP project design

	Literature Recommendation	MI Training (DNP Project Design)
Time	20 minutes, 1 hour, 2 hours, 6 hours	2.5 hours split between teaching modes (1 hour for computer modules, 1.5 hours for patient simulation workshop)
Teaching Modes	Didactic lecture, online learning, workshops led by certified Motivational Interviewing Trainers (MINT), group learning patient simulations	Two part online self paced computer module and a patient simulation workshop
Data collection times	Pre, Post, 2 month follow up, 3 month follow up	Pre intervention, Post intervention, 2 week post intervention
Data Sources	Behavior Change Counseling	Self-report Likert survey (Created

Index (BECCI), Motivational Interviewing Knowledge and Attitudes Test (MIKAT), Maslach Burnout Inventory	by the DNP student), 2-week short answer style survey (Created by the DNP student)
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Summary

The delivery of health care is rapidly changing, as new models of care are being introduced to support the increasing complex needs of patients with chronic disease (Centers for Medicare and Medicaid [CMS], 2016). Creating high-quality and impactful patient experiences has become a strategic goal for many health care organizations, and previous research has shown that creating these high-quality experiences begins with the healthcare worker (Lowe, 2012). The purpose of this Doctor of Nursing Practice (DNP) project focused on addressing ways to assist the QHCC of HK with increasing employee engagement by ways of increasing patient experiences and satisfaction. Employee engagement and patient experiences have a symbiotic and interdependent relationship (Lowe, 2012). Based on the evidence synthesized through the literature review, MI is an evidence-based supported intervention (which can be easily learned) that can strengthen the symbiotic and interdependent relationship between employees and patients.

Chapter 3. Methods

Introduction

In the health care industry, insurance payment is shifting from a pay for procedure culture towards a value based culture in which payment transformation relies on standards of quality, safety and patient experience (Lowe, 2012; Sherwood, 2013). Employee engagement is the base of high performance and quality care, and is positively correlated with patient experiences (Lowe, 2012). Previous research has shown levels of employee engagement are related to staff retention and patient centered care, which leads to positive outcomes in the long run (Lowe, 2012). Creating quality experiences for patients begins with the health care worker. The purpose of this Doctor of Nursing Practice (DNP) project focused on introducing and teaching MI to the staff at the QHCC of HK to improve patient experiences, which is a proactive way to increase employee satisfaction. Chapter three will focus on the methods that were used to develop the practice change and will include a description of the assessment tools, procedural guidelines, data collection procedures, required resources, process and outcome variables, data analysis plan, limitations and the timeline of events for the completion of the DNP program.

Conceptual framework

The Iowa Mode of Evidence-Based Practice (EBP) To Promote Quality Care described by Titler et al., (2001) was used to guide this practice change. Chapter Two went over steps one through five, and this chapter will discuss step six in the Iowa Model which was implementation the practice change (Titler et al., 2001).

Objectives

The objectives for this EBP Implementation plan was written to follow the PICO framework.

P-Population: Clinic staff employed at a primary care practice setting that lack formal career development opportunities to improve patient care.

I- Intervention: Motivational Interviewing training

C-Comparison: Current practice

O-Outcome: Increase employee engagement and improve patient experiences.

The Clinical Question: Will Motivational Interviewing training increase employee engagement while simultaneously improving patient experiences?

Evidence Based Practice Implementation Plan

Overview. The Queen's Health Care Centers provide primary care to a variety of patient populations, and continuously strive to improve the quality of care for its patients (Queens Health Systems, 2017). Engaged healthcare employees are the foundation for which quality care and positive patient experiences depend upon (Peltier et al., 2009), (Press Ganey Associates, 2016). In a 2006 Press Ganey Employee Voice Survey, the Queens Health Care Centers of Hawaii Kai Clinic (QCHCC HK) had results reflecting the lowest scores related to the key drivers of workforce engagement. Since workforce engagement and patient experiences are directly related to each other, to prevent any decline in patient experiences, it is necessary to improve the engagement of employees (Press Ganey Associates, 2016). Motivational Interviewing (MI) is a way to stimulate engaging and meaningful conversations with patients, and allows the healthcare worker to practice reflective listening while being non-judgmental and non-confrontational when speaking. This style of communication allows the healthcare worker and patient to collaborate on health goals allowing the patient to become more involved in their care, resulting in the employee to feel a sense of accomplishment, which further engages them in their work (Baird, 2014; Larson, 2012; Substance Abuse and Mental Health Services

Administration and the US Department of Health and Human Services Health Resource and Service Administration [SAMHSA, HRSA], 2011)

Practice change.

The practice changes introduced and taught MI to both clinical professional and non-clinical professional employees of the QHCC of HK via two methods. The first method was a two-part self-study interactive computer module, and the second method was through a group learning patient simulation seminar. The self study MI modules explained MI, the evidence supporting its use, its basic underlying principles, and a concept known as the “spirit” of MI. Following the module, employees had an opportunity to practice their newly learned skills through simulations that dealt within the scope of their job that occur every day in the clinic setting. This project focused on introducing and teaching basic MI skills to the employees in a primary practice setting to increase the knowledge (of MI), value and use in daily practice. The practice change is explained in further detail in the subsequent sections.

Characteristics of the innovation. In the work of Rogers (2003), *The Diffusion of Innovations Theory*, Rogers describes the characteristics of different innovations, and provides an analysis on the factors that make an innovation successful, and also explores factors that individuals fail to address, leading to the unsuccessful spread of an innovation. He further discusses the different types of adaptor categories that affect the rate of which an innovation is diffused (Rogers, 2003). The Diffusion of Innovation theory is a valuable model when considering change, and requires innovators to consider how the innovation will meet the needs of all adaptor types (Rogers, 2003). The characteristics that need to be considered when it comes to the extent of an adoption include relative advantage, compatibility, complexity, trialability and observability; which will be discussed in the following paragraphs.

Relative advantage. The adoption of this practice change is aimed at improving employee engagement and patient experiences. Increasing these two factors puts the organization at a huge advantage for meeting quality care standards and patient outcomes. Several studies done by Barnes & Ivezaj (2015), Hardcastle et al., (2012) and Lundahl et al., (2013) have demonstrated that MI has the potential to improve some modifiable risk factors such as BMI and activity levels. Currently, there is nothing being done to address engagement levels at the clinic, thus adopting this practice change can be simply thought of as “better than doing nothing.”

Compatibility. The “spirit” of MI focuses on empathy, patient-provider collaboration, exploring ambivalence, autonomy, and the principles of MI, which include rolling with resistance, enhancing empathy, developing discrepancy and supporting self-efficacy (Hardcastle, Blake, & Hagger, 2012). Adopting the use of MI skills into practice is intuitively appealing to patients, because the spirit and principles of MI coincide with what it means to provide comprehensive patient care (Söderlund, 2010).

Complexity. MI is a set of communication strategies that are simple to learn, making them ideal to teach. The scientific and evidence base of MI has grown, and studies have shown that MI can be easily learned in as little as several one hour sessions (Edwards et al., 2015; Spollen et al. 2010). Although MI can be easily learned, using this conversation style with patients may be difficult to do, and may take some time to get used to. Since the research concludes MI is easily learned and can be learned through brief interventions, self-paced computer modules were used to teach the conversational style, tone and “spirit” of MI. Since using it with patients may be more of a challenge than simply learning it, the interactive seminar was designed to have the staff practice using it, which was done through patient simulations.

Trialability. Trialability is defined as “the degree to which an innovation may be experimented with on a limited basis” (Rogers, 2003, p. 258). Innovations are easier to adopt if they can be easily tried out, on a temporary basis (Rogers, 2003). The principles of MI can be applied not only to chronic disease, but it can also be applied to general everyday conversations that take place in the clinic, as it is a way to enhance listening skills and show empathy towards others. This behavior change counseling method is easily learned, and can be gradually incorporated into daily patient encounters without deviating too much from the traditional advice giving methods. The implementation is easy to try, and does not come with any risks.

Observability. The chances of adoption and diffusion of an intervention are greater if the innovation is observable to others (Rogers, 2003). The use of MI can be heard through the interactions between patients, and also seen through the body language and facial expressions exchanged during the interaction, making this innovation visible to others. Staff may see that patients feel like their opinions matter more, and that patients are more inclined to come back for follow up visits from the positive interaction of the current encounter, which may result in the continued use of MI with patients, and also a recruitment of users of the innovation.

EBP implementation plan. Implementing the practice change is step six of the Iowa Model (Titler et al., 2001). The implementation phase consisted of three stages. The first stage was the assessment phase, which determined the employee’s attitudes toward MI, and knowledge about MI and the use of MI in actual practice. The second phase focused on the introduction and education of MI. MI education was provided to employees through an interactive computer module and an interactive group learning patient simulation seminar. The third phase focused on evaluating the intervention, where post-intervention surveys were used.

Sampling Plan

Application of users of the innovation. The Diffusion of Innovation Theory described by Rogers (2003) discusses the importance of communication and identifies the different types of communicators that affect the rate of diffusion. The following section identifies the communicators and their roles they play in affecting the rate of diffusion.

Change agents. Change agents are responsible for planning, implementing and executing the innovation of change (Rogers, 2003). This individual is responsible for laying out the strategies, organizing the design, timeline, translation and evaluation of the entire innovation (Rogers, 2003). The change agent for this DNP project was the DNP student.

Change Champion. The change champions support the change agent, and are individuals who believe in the innovation and want a change to occur. They provide support to the change agent, and play key roles in connecting the change agent to the required resources in times of need (Rogers, 2003). The change champions were the two content experts; the Administrator of the Queens Health Care Center Ambulatory Clinics, and the Queens Clinically Integrated Physician Network (QCIPN) Administrator.

Opinion leaders. Opinion leaders are individuals who have a great deal of influence on their coworkers and peers, and are able to persuade others to follow their lead (Rogers, 2003). The opinion leaders included the Medical Director of Ambulatory Services, the Manager of the QHCC HK, and the QHCC HK program director.

Adopter categories. Rogers (2003) Diffusion of Innovation Theory also talks about five categories of adopters that affect the rate of adoption of an innovation. Each of these five categories of adopters hold varying degrees of attitudes towards the innovation that must be taken into consideration to ensure successful and timely adoption of a practice change (Rogers,

2003). These five categories include innovators, early adopters, early majority, late majority and laggards, which are described below.

Early adopters. Innovators are the first users to adopt an innovation, are usually the ones willing to take risks, and are important players that bring new ideas into the system (Rogers, 2003). This adaptor category is willing to accept setbacks, and is classified as venturesome (making them not in the “in-crowd”), and tends to have more formal education and social participation (Rogers, 2003).

Early Majority. The early majority adopters are characterized as individuals who seldom lead and who tend to adopt an innovation primarily because of social influence (Rogers, 2003). They usually follow after many of their peers and opinion leaders have already adopted the innovation (Rogers, 2003).

Late Majority. The late majority adopters remain skeptical, and must wait for uncertainty to pass in order to adopt an innovation (Rogers, 2003). These individuals give-in to peer pressure and only adopt an innovation after it has been adopted by the majority of society (Rogers, 2003).

Laggard. Laggards possess the highest degree of skepticism and are suspicious toward the innovation (Rogers, 2003). Laggards tend to focus more on “tradition”, and have the lowest social and financial resources (Rogers, 2003). It is important to categorize the different users of an innovation, because different categories require different adoption strategies (Kaminski, 2011). The users of my innovation included patient service representatives/front office, and the back office, which included medical assistants, and a registered nurse. The results from the latest Press Ganey Employee Satisfaction survey results revealed the overall employee “readiness for change” (which is a factor related to employee engagement) was below satisfactory. As a result

of this most recent score, all users of my innovation were all assumed to be in the “laggards” category.

Innovations are not increased overnight, and are rather adopted in different stages, which include knowledge, persuasion, decision, implementation and confirmation (Kaminski, 2011). Education about the relative advantages, compatibility, trialability and complexity of the innovation, were used to gain a favorable attitudes towards the innovation.

Social Systems

The healthcare organization and practice setting. The Health Care organization that adopted this practice change was the Queen’s Health Care Center of Hawaii Kai (QHCC HK), located in East Honolulu. The QHCC HK clinic provides primary care services for adults, including preventative health, chronic disease management, and acute illness/injury care (Queens Health Care Centers [QHCC], n.d.). The practice setting is led by five physicians, five medical assistants, four patient service representatives (front office staff members) and one registered nurse who serves as a coordinator (S.Neal-Fujimoto, personal communication, March 24, 2017).

Sample. The accessible population of the sample included all the healthcare employees at QHCC HK, but for this project, the population that participated was the registered nurse, the five medical assistants, and the four patient service representatives at the practice site. The physicians did not participate in this intervention due to time commitments and ongoing projects that were made prior. Although physicians are key to providing care, it is also important to recognize that the rest of the team is as equally important, even though they do not provide direct medical care, which is why this intervention was not targeted solely for physicians.

Inclusion/exclusion criteria. All front office employees, nurses and medical assistants of the QCHCC HK was included in this practice change, regardless of previous education or

experience with MI. Participants who were excluded included staff of the clinic who do not make direct patient contact, and physicians will be given the choice whether or not to participate in the intervention due to their time commitments that were made previous to the implementation of the project.

Stakeholder engagement plan. Implementing any type of change in a healthcare setting is very process oriented, and the success of the innovation is heavily dependent on the interests and strengths of the stakeholders (Horev & Babad, 2005). Stakeholders are essential to a successful implementation of EBP, because they play a vital role in in the organization's performance, and are directly involved in decision-making processes (Horev & Babad, 2005). Stakeholders also have a big influence on organizational policy, making them a crucial component for the success of the implementation (Horev & Babad, 2005). There were several stakeholders involved in this EBP implementation, and represented different sections of the organization. These stakeholders influenced different steps of the implementation process. The following section will describe the stakeholder recruitment process, and also will identify the role of the stakeholders.

Recruitment/marketing plan. The first step of recruitment is to identify which stakeholders have a vested interest in the intervention, and have the authority and networking to assist with carrying out the implementation and evaluation process (US Department of Health and Human Services Centers For Disease Control and Prevention [CDC], 2011). Identification of stakeholders included individuals who were able to increase the credibility of the evaluation, implement the interventions needed to conduct the evaluation, advocate for the need for program changes, and also individuals who have the authority and funds to continue or expand the

program changes (CDC, 2011). The positions and names of the stakeholders that were identified to ensure success of this project are included in the Table 1.

Table 2.

Stakeholder Roster

Stakeholder Name	Position
Stakeholder A	Queens Clinically Integrated Physician Network (QCIPN) Administrator
Stakeholder B	Administrator of Ambulatory Clinics
Stakeholder C	Manager of the Queens Health Care Center of Hawaii Kai (QHCC HK)
Stakeholder D	Director of Programs at QHCC HK
Stakeholder E	Medical Director of Ambulatory Clinics

Once names and positions of the stakeholders were identified, a marketing strategy was developed to create a buy in. The change agent presented the research findings, the implications that MI has for use in practice, and the proposed EBP intervention at several staff and administrative meetings to create a buy in.

Role of the stakeholders. The role of the stakeholders is to provide guidance, expertise, network and support for the change agent to develop a program description and evaluation plan that was sustainable and appropriately fit within the priorities of the entire organization. Table 2. provides a summary of the stakeholder contribution to the evaluation plan. Each stakeholder identified their motivation to become involved with the evaluation, and is summarized in table 3.

Table 3.

Stakeholder contribution to the practice change and evaluation plan

Stakeholder	Program Description	Evaluation Question	Data Collection	Data Management	Data Analysis	Dissemination
Stakeholder A	X	X			X	X
Stakeholder B	X	X				X
Stakeholder C	X		X	X	X	X
Stakeholder D	X		X	X		X
Stakeholder E	X					X

Table 4.

Stakeholder motivation to become involved with program evaluation

Stakeholder	Motivation to become involved
Stakeholder A	Meets criteria that is required to move towards value based care
Stakeholder B	Has the potential to improve the overall delivery of patient care
Stakeholder C	Has the potential to improve patient and employee relationships
Stakeholder D	Has the potential to improve patient and employee relationships
Stakeholder E	A great way to introduce patient centered care to everyone

The stakeholders had the hugest impact in the beginning stages of the Iowa Model of Evidence Based Practice described by Titler et al., (2001). The first step of the Iowa Model was to identify a problem/trigger (Titler et al., 2001). When identifying a problem, it was necessary

to make sure the problem being addressed was a priority for the organization, and this was where the stakeholders and content experts really helped with honing in on the focus of the implementation.

Application of communication processes. The rate and extent of adoption heavily relies upon communication processes. An individual's relationship around the exchange of information determines the effectiveness that an innovation will be transmitted from one source to another (Rogers, 2003). Within the communication process, there lies homophily and heterophily. Majority of communication between humans is the exchange and transfer of ideas between two individuals who are alike, or similar which is referred to as homophily (Rogers, 2003). The attributes these individuals may share include beliefs, education, social status etc. The most effective communication is between two homophilous individuals (Rogers, 2003). However, as Rogers (2003) states, the most common problem among communicating individuals, is heterophily, where the individual's beliefs, values, communication, education etc. are different. Rogers (2003) further states heterophily is necessary for the diffusion of an innovation to occur, since the individuals need to exchange knowledge and experience.

The following sections will provide a layout of the communication process between heterophilous and homophilous groups using the two major types of communication channels that Rogers (2003) describes which are interpersonal and mass media.

Interpersonal. Interpersonal communication channels are described as an exchange of information that takes place face-to-face (Rogers, 2003). Examples of interpersonal communication include meetings, educational sessions, seminars and in person conversations (Rogers, 2003). Interpersonal communication is considered slower than mass media, but can be more effective if persuasion is a goal of the communication process. Interpersonal

communication was utilized with heterophilous individuals, as this was a way for questions to be addressed and answered immediately, and further information on the subject to be exchanged or clarified when needed. Interpersonal communication also took place between homophilous individuals, to allow for in person collaboration and further discussion and exchange of ideas on the subject. During the stages of stakeholder engagement, interpersonal communication was the main type of communication that was used because persuasion was vital to creating a buy in from the stakeholders.

Mass media. Mass media channels include the transmission of information over a mass medium, such as email, web links, radio broadcasting, etc., and are considered rapid and efficient ways to diffuse a message (Rogers, 2003). They differ from interpersonal communication, because it does not involve the face-to –face exchange of information. Mass media such as email was used to confirm meeting times, and to reinforce/review the matter discussed via interpersonal communication. Email was used as a mode of communication to relay information, such as any type of instructions, confirming meeting times, and provided a summary of what was discussed via interpersonal communication.

Evaluation Plan

The program evaluation was guided by the Center for Disease Control and Prevention's Framework for evaluation standards (Milstein, Wetterhall, & CDC evaluation working group, 2000).

Evaluation question. The evaluation question was: Will Motivational Interviewing training (a two part series-self study module and a 90 minute interactive in-person patient simulation seminar intervention) increase employee's value of MI and increase employee's use of

MI at the Queens Health Care Center of Hawaii Kai, located in East Oahu over the period of two-weeks?

The SMART criteria defined by the College of Nurses of Ontario (2014) was used to write the goals and objectives of the evaluation design and was used to develop the evaluation question. SMART is an acronym, which stands for specific (the target population is clearly identified), measurable (Can the measure be quantified?), achievable (Can you have the question answered in the proposed time frame with the resources that are available to you?), realistic/relevant (Does the evaluation question address the triggers that were defined within the organization?) and time-limited (Does the evaluation question have a time frame?) (College of Nurses of Ontario, 2014).

The evaluation question began as a “working” evaluation question that was based on the PICO statement. The “working” evaluation question stated: “Will the introduction and education of Motivational Interviewing (MI) techniques affect change by increasing acceptance, value and use (in actual practice) to improve the self-efficacy and health outcomes of obese/inactive adults?” The SMART criteria helped refine the evaluation question by clarifying each term, making it more specific and measurable. A table was created that incorporated each SMART criteria in each column heading, and in the corresponding column, sections of the “working” evaluation question were added and edited to fit the specific criteria. The original clinical question did not have a specific setting, or time frame and by using the SMART criteria, were able to add these two components to strengthen the evaluation question. The achievability and time frame made it difficult to measure the degree of change in patients, or their outcomes (such as biometric data), which prompted the focus of the target population to the staff. The evaluation question was revised and edited several times with the help of content experts and faculty. The

evaluation question was answered through a process evaluation design that determined how well employees understood and utilized the basic skills of MI. The integrity of the evaluation plan will be discussed in the following sections, focusing on each of the CDC program standards.

Integrity of the evaluation design. Program evaluations are becoming a vital resource in public health practice, because they allow the entire workforce build a platform of common understandings and evaluation concepts (Milstein et al., 2000). The Centers for Disease Control (CDC) has created a framework for program evaluations to help develop program evaluations determine exactly what needs to be accomplished in order for an evaluation to be effective. This framework also ensures the overall integrity of the program design itself (Milstein et al., 2000). The CDC Evaluation Framework includes six interdependent steps, where each preceding step builds on the previous step. The CDC Evaluation Framework steps are upheld by standards that are required for an effective evaluation, and include utility, feasibility, propriety and accuracy, which are further discussed in the following paragraphs (Milstein et al., 2000).

Utility. Utility standards address the groups or individuals that will be impacted by the evaluation, and also ensures that the needs of the users are met (Milstein et al., 2000). The program evaluation results will be used by the administrators of the Queens Clinically Integrated Physician Network (QCIPN) and the administrators of the Queens Health Care Centers (QHCC) Ambulatory Clinics to determine if this intervention can be applied in all ambulatory clinics, and eventually be taught to all employees. The organization is currently going through a change in insurance payment transformation that focuses on quality care, steering away from a pay per procedure culture. Using MI skills in daily practice is one of many things that employees can do to improve patient experiences, and positively impact the quality of care. The administrators would like to eventually incorporate MI into all primary care practice settings, and will be using

this DNP project as a pilot before implementing this into all of its ambulatory clinics. The widespread of this implementation may also help the organization qualify and apply for additional grants or funding to assist with additional staff training to improve patient care.

Feasibility. Feasibility standards ensure the evaluation is practical, and determines if the evaluation can be done given the time, available resources and expertise at hand (Milstein et al., 2000). The standards of feasibility prompted the identification of potential barriers and also created much discussion and collaboration on how these potential problems will be resolved. The barriers that were identified when designing the evaluation plan included time, finances and the expertise at hand. Previous research done on the effectiveness of teaching MI used trained professionals who had expertise in teaching motivational interviewing to evaluate the implementation. Looking at the resources, expertise and time that is available, an alternative evaluation approach was taken. Hiring a trained professional MI Trainer to evaluate the implementation was not feasible, given the available finances and time that was available to implement and evaluate the program, which guided the evaluation to be based off of self-report.

Propriety. Propriety standards ensure the evaluation is ethical, guides the evaluation in protecting the welfare of human participants, and addresses any conflicts of interest (Millstein et al., 2000). The evaluation and the intervention did not raise any ethical issues, and did not hold any conflicts of interest. The evaluation was designed so each person received equal and fair treatment, and that the rights and identities of individuals who was involved are protected, by keeping the personal identity of all human subjects anonymous.

Accuracy. Accuracy standards make sure the evaluation yields correct and accurate information (Milstein et al., 2000). A systematic procedure was developed from implementation through program evaluation to ensure all procedural steps were completed in order. Accuracy

was also ensured in the evaluation program, as the appropriate qualitative methods was used to evaluate the intervention.

Program Description. This section describes how the program currently works, and how the EBP intervention has the potential to improve the current practice of the organization. The Queen's Health Care systems has built a legacy of providing quality health care to their patients for over 150 years, and continue to look for innovative ways to continue to provide quality services (Queens Health Systems, 2017). The shared mission of the Queens Health System is to "provide in perpetuity quality health care services to improve the well-being of Native Hawaiians and all the people of Hawaii (Queens Health Systems, 2017)." The next two sections will describe the current practice, and how the program changes has helped to create a new practice change that upholds the shared mission of the Queens Health Systems.

Current practice. The current practice setting at the QHCC of HK strives to provide quality care and upholds the Queens Health Systems shared mission, but when it is analyzed in depth, there is a lack of formal employee enrichment training to assist the employees in learning new ways to provide care within this setting.

New Practice. This evaluation's intervention, motivational interviewing training, was intended to improve current practice by providing an opportunity for employees at this site to become better skilled at engaging patients by receiving enrichment training that offers tools to use in daily practice. MI provides skills that help staff engage patients in meaningful conversation, and allows the employee to be non-judgmental and express empathy towards the patient. MI focuses on the use of open-ended questions to allow for a collaborative conversation aimed at setting goals that is realistic and practical for the patient, given their current attitudes, feelings and level of motivation. MI can be used by all staff at the clinic, and not just the

physicians. MI can change the way a conversation is approached by the medical assistants with difficult patients or patients that are perceived as non-compliant, and can also change the way a patient service representative answers the phone or responds to a person who is upset, which ultimately has the potential to turn around a patients negative experience.

Anticipated impact of the new practice on providers and patients. In a 2006 Press Ganey Employee Voice Survey, employees of the Queens Health Care Centers of Hawaii Kai Clinic (QCHCC HK) recorded the lowest scores related to the key drivers of workforce engagement. Employees contribute to quality care the most when they feel pride, personal and professional fulfillment in the care they provide to patients (Press Ganey Associates, 2016). Stakeholders of this organization believe the daily use of MI may be a way to improve Press Ganey survey results over time by increasing workforce engagement. MI creates a collaborative relationship between provider and patient (MINT, 2001). This collaboration engages the patient in management of their care, and increases their feelings of trust in their provider (MINT, 2001). The staff, in return, feel a sense of accomplishment on the level of both professional and personal accomplishment (MINT, 2001).

Definitions. This next section will provide definitions for the variables that were involved in this program evaluation.

Motivational Interviewing.

Motivational Interviewing is a “collaborative conversation style for strengthening a person’s own motivation and commitment to change” (Miller & Rollnick, 2009). In layman’s terms, it can be referred to as a collaborative conversation style that is used to increase an individual’s motivation and commitment to change (University of Massachusetts, n.d.). MI recognizes that all patients are not fully committed to making the necessary life changes to

improve their health (due to motivational factors, socioeconomic factors, career commitments etc.), and works with what the patient is willing to do (Miller & Rollnick, 2009).

MI is not just an intervention but is also a “spirit” (University of Massachusetts, n.d.). The “spirit” of MI is based on three elements, and includes collaboration between the two people communicating, evoking or drawing out (rather than imposing) on a person’s ideas about change, all while focusing on autonomy (rather than authority) (University of Massachusetts, n.d.).

There are also 4 principles of MI that include expressing empathy, supporting self-efficacy, rolling with resistance and developing discrepancy. Empathy is described as taking an active interest and showing effort to understand another person’s perspective, and allows the provider to understand and feel the patient's frame of reference, allowing the patient to feel like they are being heard and understood (University of Massachusetts, n.d.). Self-efficacy refers to the self-belief that a change is possible, and MI works to increase self-efficacy by focusing on various skills and strengths the patient possess to give them confidence and help them believe that they are capable of making a change (University of Massachusetts, n.d.). Conflict or resistance in treatment usually arises when the provider does not agree with the habits or choices an individual makes, and provides advice or a solution to correct the problem which is known as the “righting reflex” (University of Massachusetts, n.d.). When a provider “rolls with resistance” they allow the patient to determine what they think the problem is and also come up with the solution they think work best for them (University of Massachusetts, n.d.). Providers assist patients in developing discrepancies by helping patients see where they are in relation to how close or far they are from reaching a goal, allowing patients to become aware of how their behaviors hinder them from reaching their goals (University of Massachusetts, n.d.).

For the purposes of this project, the term MI did not only focus on the communication intervention itself, but more importantly emphasized the “spirit,” underlying principles and values of this communication style.

Problem. This evaluation focuses on low employee engagement, defined as below satisfactory workforce engagement Press Ganey Employee voice survey scores. The problem centers on disengagement of employees with their work, affecting the quality of patient experiences. MI aims to make an impact in patient care by increasing employees' communication skills so they can have a better connection with patients to improve their experiences and health outcomes.

Baseline. The baseline evaluation was an evaluation that was developed by the change agent, and determined the participants knowledge, value and use of MI in daily practice. The operational definitions that were used included the employee's value of MI and use of MI at work. These operational definitions were measured with a self-report Likert scale survey (created by the change agent) that was completed by the participants pre-intervention.

Intervention. The intervention was operationalized in three phases. The first phase was the assessment phase that took a baseline measurement as described in the section above. The second phase was the implementation of the intervention, which included the use of a computer module and an interactive patient simulation seminar. The computer modules were a series of self-paced online courses that was created by the University of Missouri Kansas City School of Nursing and Health Studies Mid-America Addiction Technology Transfer Center (Mid-America ATTC) under a cooperative agreement from the Substance Abuse and Mental Health Services Administration (SAMHSA), the Center for Substance Abuse Treatment (CSAT), and the National Institute on Drug Abuse (NIDA). The first two modules of the series introduced MI, its

clinical applications and underlying principles, giving a broad general overview of how it can be used and the benefits of its use. The following series of modules go more into detail on identifying specific components of behavior change and strategies that can be used to evoke and strengthen patient motivation of behavior change. The first two modules of the series were used, since they were the most applicable to the participants and the practice change.

The interactive patient simulation seminar took place with the participants during a specially scheduled staff meeting. During this seminar, employees demonstrated the application of MI through patient simulations that were created specifically to remain within each participant's scope of practice. The change agent discussed the duties of each participant's job description with the stakeholders to understand their scope of practice, which helped with carefully crafting and developing the workshop situations that were specific to the duties of each participant's job title. With these simulations, the participants were able to practice applying the MI techniques that were introduced in the MI computer modules.

Comparison/current practice. Currently, the employees at this practice site do not have any training to build skills for patient communication, and there is no time that is set aside for any type of employee enrichment activities. Staff meetings are held, which reinforce the importance of customer service and patient safety, but there is no formal training that teaches new customer service skills. The program evaluation compared the current practice with the intervention (employee training in MI), which is more of a formal style of staff training.

Sample. The target populations for this project were all the employees who work in a primary care practice. The accessible sample was the employees who work at the QHCC of HK, and these employees will be used to represent the general population of employees involved in a

primary care practice. The positions that were represented included patient service representatives who are considered front office staff, medical assistants, and registered nurses.

Outcomes. The desired outcomes for this evaluation were to increase the value of MI and increase the anticipated use/ use of MI post-intervention. The outcome was measured by comparing pre and post-intervention self-reported Likert scale surveys. Each Likert response option was correlated with a number, which was used to calculate response averages. Pre and post intervention averages were compared for each question, and an increase in average scores served as the threshold for determining if there was an attitude of acceptance towards MI. If there is an attitude of acceptance towards MI and an increase of anticipated use/use of MI, the goals of the intervention will be considered "met." If there is no change in attitude of acceptance towards MI and resistance still persists, the goals of the intervention will be considered "not met." The operational definition for both outcomes include if the participant tries to use MI post intervention, and if the participant believes that the use of MI can help to increase patient experiences.

Discussion. The needs of the organization, time restraints, and available resources were factored into the design of this evaluation. In a typical MI evaluation, a MI trainer would be the one to evaluate the use of MI in practice via one of two ways. The first way would be sitting in on the interaction and use a validated scoring technique to determine if the providers are using MI. The second way is by watching a recording of the session and scoring the interaction.

The project stakeholders, content experts and change agent came to a unanimous decision that the time and resources could not support this type of evaluation, and agreed to evaluate the program through self-reported surveys. The project stakeholders were very helpful in guiding the direction of the evaluation questions, and helped narrow down the list of other possible

evaluation questions while keeping the organization's needs, resources and time restraints in mind.

The mediating factors that may impact the intervention include false self-report measures reflecting inaccurate outcomes. Self-report data is further addressed as a limitation because it has the potential to pose a threat to data quality and is further discussed in the limitations section.

Data management plan. The data management plan is an essential part of a program evaluation, because it safeguards the validity and credibility of the evaluation's findings. The data management plan was created to make sure that the data was accurate, and that it answered the evaluation question in a way that allowed the results to be used to make an impact in the organization.

Data sources. It was crucial for the data sources to fit the needs of the evaluation, but there were no published validated tools that produced results that were confined within the needs of the evaluation question. As a result, a baseline and post intervention had to be designed to meet the needs of the evaluation question. The data sources; pre-intervention, post-intervention and two week post-intervention surveys were designed by the change agent and modeled after several other surveys that were used to evaluate MI teaching interventions from the works of Pollack et al., (2015), Spollen et al., (2010), and Edwards, et al., (2015) that used validated evaluation tools such as the Motivational Interviewing Knowledge and attitudes test (MIKAT), the Behavior change counseling index (BECCI), the 12 Item MI Assessment Supervisory Tools for Enhancing Performance, and the Maslach Burnout Inventory Scale. The themes of the questions were used to create questions that were altered to fit the needs of this particular project evaluation. It was written to the literacy level of a fifth grader for easy comprehension, and is

provided in Figure 4. The data source and examples of the data elements are organized by outcome are included in Table 4. below:

Table 5.

The data source and data elements

<u>Outcome A: Use of Motivational Interviewing</u>			
Data Source	Question #	Data Element	Answer Selection
Self-report baseline and post intervention survey	2	I use Motivational Interviewing in my daily practice	Never, Rarely, Sometimes, Most of the time, All of the time
Self-report two week post intervention survey	1	Following your completion of the MI training, do you try to use MI at work daily?	Yes, No, Open response
<u>Outcome B: Perceived value of Motivational Interviewing</u>			
Data Source	Question #	Data Element	Answer Selection
Self-report baseline and post intervention survey	4	Rate the impact the use of Motivational Interviewing skills could have on facilitating meaningful conversations and relationships with patients	Not sure, None, A little, A good amount, A lot
Self-report baseline and post intervention survey	5	Please rate the impact that the use of Motivational Interviewing could have on increasing your job satisfaction	Not sure, None, A little, A good amount, A lot
Self-report baseline and post intervention survey	6	Please rate the impact the use of Motivational interviewing skills could have on increasing your personal career fulfillment	Not sure, None, A little, A good amount, A lot
Self-report two	2	If you try to use MI at work, do you think it has helped increase the	Yes, No, open response

week post
intervention
survey

quality of patient experiences?

Self-report two
week post
intervention
survey

3

When you use MI, do you feel you
have made more of a positive
impact on the patient's experience
(as compared to not using MI)?

Yes, No, Open
Response

Self-report two
week post
intervention
survey

4

Please give a specific example on
how using MI has helped you feel
like you were able to help the
patient

Open Response

Baseline and Post Intervention Survey						
1. How do you rate your current understanding of Motivational Interviewing?	Poor	Fair	Okay	Good	Excellent	Comments:
2. What percentage of patients do you use Motivational Interviewing with?	0-10%	10-25%	24%-50%	50%-75%	75%-100%	Comments:
3. How much do you think Motivational Interviewing will increase the quality of patient experience?	Not sure	None	A little	A good amount	A lot	Comments:
4. Please rate the impact the use of Motivational Interviewing skills could have on facilitating meaningful conversations and relationships with patients	Not sure	None	A little	A good amount	A lot	Comments:
5. Please rate the impact the use of Motivational Interviewing could have on increasing your job satisfaction	Not sure	None	A little	A good amount	A lot	Comments:
6. Please rate the impact the use of Motivational Interviewing skills could have on increasing personal career fulfillment	Not sure	None	A little	A good amount	A lot	Comments:
2 week post intervention survey						
Following your completion of the MI training, do you try to use MI at work daily?	Yes	No	Comments:			
If you try to use MI at work, do you think it has helped increase the quality of patient experiences?	Yes	No	Comments:			
When you use MI, do you feel you have made more of a positive impact on the patient's experience (as compared to not using MI)?	Yes	No	Comments:			
Please give a specific example on how using MI has helped you feel like you were able to help the patient	example:					

Figure 4. Data sources

Data collection procedures. The self-report surveys were administered at baseline and after completion of the intervention. To maintain participant confidentiality, the surveys were collected without names on them. On the days that the surveys were administered, the change agent was present at the clinic to answer any questions that the participants had. Once the participants completed the form, they handed it to the change agent where it was kept in a

secured folder. After the surveys were collected, the results were put onto an excel spreadsheet. The data collected was only intended to collect only the data that was necessary to answer the evaluation question.

Data analysis plan. The change agent was responsible for interpreting the data from the administered assessments. The descriptive statistics that was used to analyze the data included the range of responses pre and post-data collection, the average of the pre and post data responses, the overall change in the trend of pre and post data responses, and the average change in pre and post survey responses. The statistics were be calculated via Microsoft Excel Spreadsheets.

Data presentation plan. The change agent presented the data through charts, tables and graphs, and can be seen in Chapter 4.

Resources

This section outlines the resources that were required for this DNP project. The different types of resources were categorized into financial needs, human resources, time and physical space. Sustainability and resourcefulness played a vital role in determining which resources were needed and which resources were unnecessary to the project.

Financial. A negotiable budget of \$100 was made available to purchase materials needed for this program development. During the project, there no materials were purchased, as the modules that were used are free online training tools. The staff and providers took these interactive learning modules while at work, which did not require additional pay beyond their regular compensation.

Human. This project required a lot of planning and development. Several individuals were consulted for their expertise in adult learning, program evaluation and data analysis which helped advance this project to completion.

Time. Time was an essential component that was required in developing this program. This project included setting aside both asynchronous and synchronous time. The asynchronous time was required where the staff had to manage their work time to individually complete the MI self study modules, and synchronous time was required for the MI interactive seminar.

Physical. The space required to host the MI patient simulation seminar required a medium sized room that could accommodate a little over 10 people. The records keeping room was used as the setting for the meeting, and provided a quiet learning environment that was free of distractions/interruptions.

Dissemination Plan

The main goal of dissemination is sharing the knowledge that has been produced from the evaluation process (Myers & Barnes, 2004). Dissemination shares the findings of an evaluation, in addition to the rationale and impact of a project (Myers & Barnes, 2004). The summary of the results was provided to the participants, stakeholders and staff through electronic summary data sheets.

Role of stakeholders. The stakeholders will use the program results and design to develop other programs that is aimed at teaching MI in part of other quality improvement implementations and integrations into practice As needed, the stakeholders will also use the program results and the program description to apply for quality improvement grants, mental health implementation grants, and to supplement other grant opportunities.

Sustainability of the practice change. Evaluation and program improvement is vital for the continuation of any type of practice change (Milstein et al., 2000). The evaluation of the intervention survey results were analyzed to determine the strengths and weaknesses of the program, and highlight things that could be changed to improve the integration of the practice change in the future.

Human Subjects Considerations

This practice change has been designed to protect the rights of all human subjects involved. The project implementation did not assign any randomization to subjects for different treatment, and did not include any vulnerable/at risk populations. The implementation itself did not add additional risk beyond the standards of practice, and only standard, evidence-based practices were implemented. The need for IRB was not needed for this project, as this project was quality improvement initiative and not research.

In addition to human subjects consideration, the DNP student has completed the Collaborative Institutional Training Initiative (CITI) course in human subjects protection, as required by the University of Hawai'i. A committee that included faculty and clinical experts from both Queens and the University of Hawaii to ensure protection for human subjects has also reviewed accepted a project proposal prior to the implementation of the project.

Ethical considerations taken into account included autonomy, non-maleficence, beneficence and justice. Subjects were able to maintain their autonomy, as their identity remained anonymous. Any personal identification information, including names, was not used for any type of data collection.

Non-maleficence was ensured while designing the program, and extra consideration was taken to ensure that no harm or risk of harm occurred with the participants. At any time, if any

participant felt they had the potential for being harmed, they could contact the committee chair or content expert and discontinue their participation. The end result of the program was designed to benefit patients, providers, employees, and the entire organization, as this is a project that was aimed at quality improvement initiative.

Justice was another ethical consideration that was taken into account when designing the program. Each human subject had equal and fair treatment regardless of his or her position or level of education during the intervention. The program design was created in such a way to include as many participants as possible, with minimal exclusion criteria.

Limitations

The limitations to this practice change will be discussed in this section. The practice change was implemented in a fluid environment, where the conditions were not consistent, and the variables or subjects are not controlled. The inclusion criterion is also broad, as it included all employees that were involved with any type of patient contact via phone or in person.

Sample size is intended to be a limitation to the program evaluation. The total intended sample size was to be nine participants, and in actuality, there were only seven participants, making this a weak representation/distribution of the rest of the ambulatory clinic employee population.

The program evaluation was also a limitation in itself, because the instruments used to evaluate the outcomes were based on self-report, and there has not been any previously established reliability or validity of the tools used for the program evaluation. Previous research done to evaluate the learning of Motivational Interviewing (MI) was conducted with validated tools that required a sit in or a taped session to be evaluated by a trained motivational interviewing expert (Edwards et al., 2015, Spollen et al., 2010, Pollak et al., 2015, VanBuskirk et

al., 2014). There have been several other validated tools that evaluated the effectiveness of MI teaching, but all of the tools were designed specifically for behavioral health, which is not the intended purpose for this project, or was designed for use by a clinical professional, where the aim of our intervention was to teach both clinical professionals non-clinical personnel about MI communication skills. The evaluation tool that was used was created by the change agent specifically to measure the outcomes of this project, and was not validated.

The data analysis also has some data quality concerns. There was no risk adjustment to control for any employee's learning disabilities, English as a second language, or level of literacy. Data analysis was also based on self-report, which posed a concern to the quality of data.

Procedure limitations included the time that was allotted for data collection. Quality improvement in a healthcare setting involves many changes in behavior, not only from patients, but also from the providers of care. The use of MI in a practice setting requires a behavior change, because it is a different way of communicating with someone. The intervention, implementation and evaluation data had to be collected within a time frame of four months, which may be an insufficient amount of time to determine if a change has been made and most importantly, if it was sustained. Early on in the project, patient outcomes were discussed, but due to the time constraints for the data collection, evaluation was focused on the staff's use and acceptance of MI rather than patient outcomes such as biometrics.

Summary

Employee engagement is vital to providing quality patient care. The purpose of this DNP project was to introduce MI to a primary practice setting to improve patient experiences, which is a proactive way to increase employee engagement (Barid, 2014; Lowe, 2012). This chapter

reviewed in detail the data collection procedures, required resources, evaluation plan, and limitations to this DNP project. The Iowa Model of Evidence Based Practice described by Titler et al., (2001) will continued to guide this DNP project through the final steps, which was implementing the practice change, evaluating the practice change, and disseminating the results. Figure 5 provides a timetable of the tasks and activities that must be completed in order to complete the DNP program.

Timeline														
	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June
Submit ch 1-3 to chair	31-May													
Submit ch 1-3 to committee		14-Jun												
Proposal Defense			Week of July 23											
Distribute surveys for pre data				7-Aug										
Collect surveys for pre data				14-Aug										
Release MI self study modules- asynchronous (Intervention)				21-Aug										
MI seminar- synchronous (Intervention)						20-Oct								
Distribute surveys for post data						20-Oct								
Colect surveys for post data						20-Oct								
analyze data														
Interpret data														
Submit final paper to chair											1-Mar			
Submit final paper to committee											4-Apr			
Final Defense												Week of April 22		
Disseminate results														
Graduation														

Figure 5. DNP timetable

Chapter 4. Results

Introduction

Motivational Interviewing training was delivered through two different modes. Staff members were trained through two self-paced online learning modules and an interactive patient simulation workshop hosted by the change agent (Appendix A). Data was collected pre-implementation, post implementation, and 2-weeks post implementation, and was analyzed. Seven out of 15 potential participants completed the computer modules, attended the patient interactive seminar, and completed both the pre and post intervention. Of the seven participants, only four people completed and turned in the 2-week post intervention survey. This chapter discusses the results of the data collection. Looking at the overall results, the actual outcomes were similar to the expected outcomes.

Trend analysis

Staff demographics. There were a total of 15 potential participants at the clinic who were invited to receive Motivational Interviewing (MI) training, which included five physicians, one Registered Nurse (RN), five Medical Assistants (MAs), and four Patient Service Representatives (PSRs). Of the 15 employees, there were a total seven participants who participated in the MI training that consisted of completing the computer modules and attending and participating in the interactive patient simulation seminar (Figure 6.). In order to attend the interactive seminar, participants had to take and complete the two computer modules. Some employees were too busy to complete the modules, which made them ineligible to attend the interactive seminar, and some employees were on vacation during the time of the seminar, so knowing this, they chose to forego the computer modules. All of the physicians had previously arranged meetings and other time commitments, which prevented them from participating in the

intervention. The sample size of seven included two Medical Assistants (MA), one Registered Nurse (RN), and four Patient Service Representatives (PSR). The sample distribution of years of service in job position can be seen in Figure 7. Two participants had one year of service in their position and five participants had five or more years of service in their position. The staff was also asked how many years have they had any experience working with Motivational Interviewing. Six staff members reported having no experience, and one staff member reported having 1-2 years of experience working with MI.

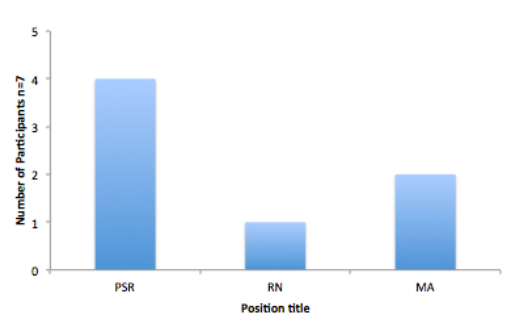


Figure 6. Staff trained in Motivational Interviewing

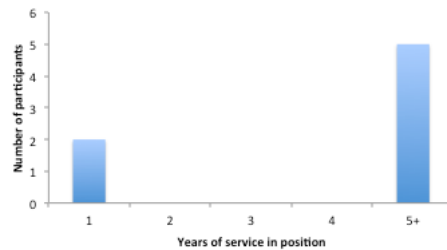


Figure 7. Years of experience in job position

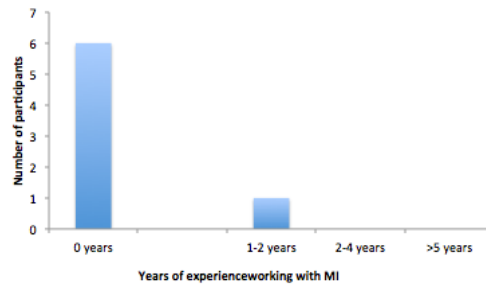


Figure 8. Years of experience or previous exposure to working with Motivational Interviewing

Pre-intervention and post intervention data. There were a total of six questions that were part of the pre and post-intervention survey. The survey was developed to determine staff member’s knowledge, attitude, use/anticipated use of MI. The response options were presented in a Likert scale format, and the results are presented for each question below.

Survey Questions.

Question #1. How do you rate your current understanding of Motivational Interviewing?

The Likert response options for Question 1 included poor (1), fair (2), okay (3), good (4), and excellent (5). A total of seven employees completed the pre and post-intervention survey. Pre-Intervention, 5 people rated their understanding of MI “poor,” one individual rated their understanding “fair”, and one individual “okay.” Looking at the post intervention data, one individual rated their current understanding as “fair”, one individual gave themselves a rating of “okay, two individuals rated their post intervention understanding of MI “good”, and one gave a rating of "excellent". Figure 9 depicts the distribution of pre and post data. Pre-intervention data showed a distribution that was heavily weighed towards lower rankings of understanding, while the post-intervention data showed a shift in distribution towards an increase in the understanding of MI. Figure 10 shows the averages of responses for both Pre and Post intervention responses, where there was an average increase from 1.42 to 3.42.

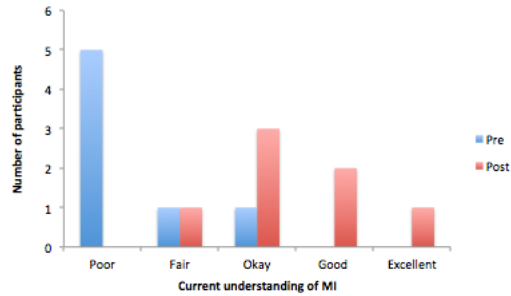


Figure 9. Question #1. How do you rate your current understanding of Motivational Interviewing?

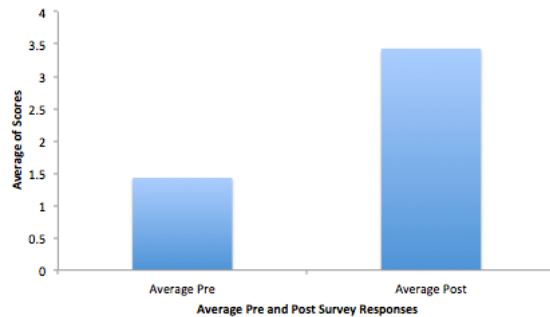


Figure 10. Average pre and post survey responses (Question #1).

Question #2. What percentage of patients would you try to use Motivational Interviewing with?

The responses for these were percentage increments and included 0-10% (1), 10-25% (2), 25-50% (3), 50-75% (4) or 75-100% (5). A total of 7 people completed the pre and post-assessment survey. Pre- intervention, six staff members reported being unsure of the percent of patients they would try to use MI with, and one person reported they would use MI with 10-25% of their patients. Post-intervention, two staff members scored themselves as potentially using MI with 0-10% of their patients, three reported using it 25-50% of the time, one reported 50-75%, and one reported 75-100%. The trend in data showed an overall increase with the percentage of patients the staff members would use MI with. Figure 12 shows the average of the scores increased from 2.14 pre-intervention, to 3.85, post intervention.

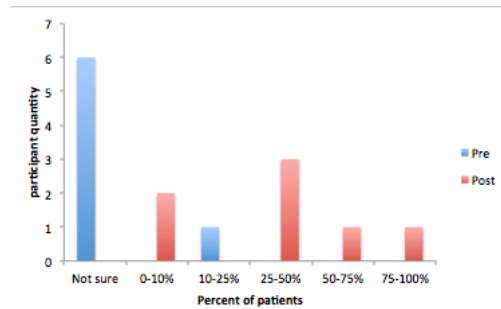


Figure 11. Question # 2. What percentage of patients would you use MI with?

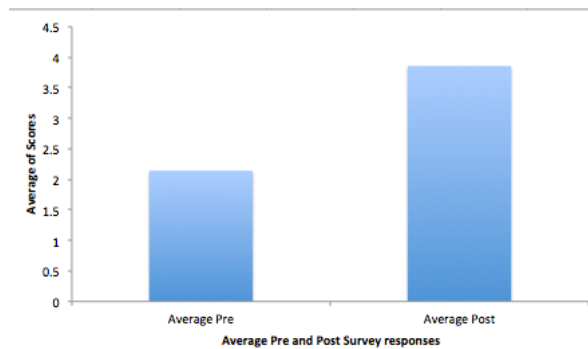


Figure 12. Average pre and post survey responses (Question # 2).

Question #3. How much do you think Motivational Interviewing will increase the quality of patient experiences?

The response options included Not sure (1), None (2), A little (3), A good amount (4) and a lot (5). Five of the seven participants responded “not sure”, one responded “a good amount”, and one responded “a lot” in the pre-assessment survey. Post amassment, three participants answered that they believed MI will increase the quality of patient experiences “a good amount”, and four responded that MI will increase patient experiences “a lot.” Figure 13 shows the overall trend of the pre and post intervention responses, where there was a shift from majority of the staff being unsure of the effect MI will have on patient experiences, to believing it will increase the quality of a patient's visit. When comparing the average of the pre and post survey responses, the average increased from 2 to 4.57 (Figure 14).

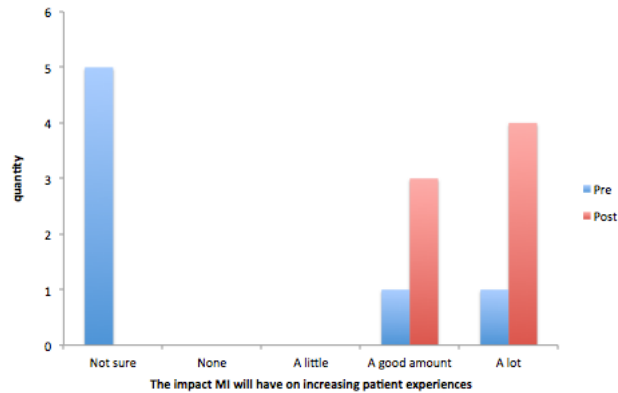


Figure 13. Question #3. How much do you think MI will increase the quality of patient experiences?

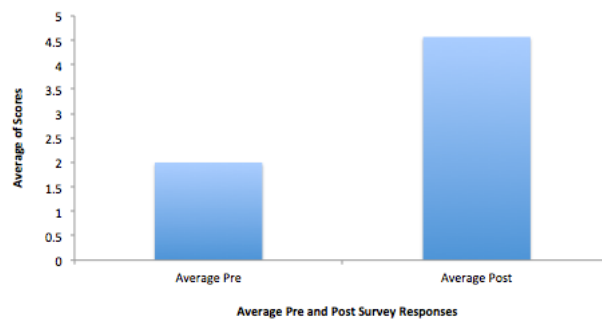


Figure 14. Average pre and post survey responses (Question # 3).

Question #4. Rate the impact that the use of MI could have on facilitating meaningful conversations and relationships with patients.

The Likert responses were the same as the previous question; “Not sure” (1), to “A lot” (5). Figure 15 shows the individual responses pre and post-intervention. Pre-intervention, five people answered “not sure” one person responded “a good amount” and another individual responded “a lot.” Following the intervention, one person responded that MI could help “a little,” two people responded that MI could help “a good amount”, and four people responded “a lot.” The overall response trend to this question showed that majority of the staff members went from

being unsure of how MI could help build rapport pre-intervention, to believing that it would help to facilitate a stronger rapport with patients. Quantitatively, the intervention survey responses increased from an average of 2 to 4.42 as shown in Figure 16.

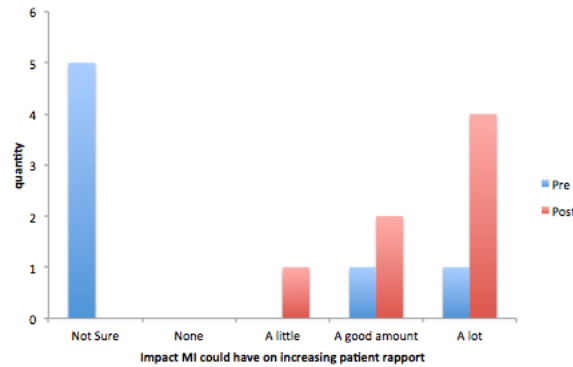


Figure 15. Question #4. Rate the impact that the use of MI could have on facilitating more meaningful conversations and relationships with patients

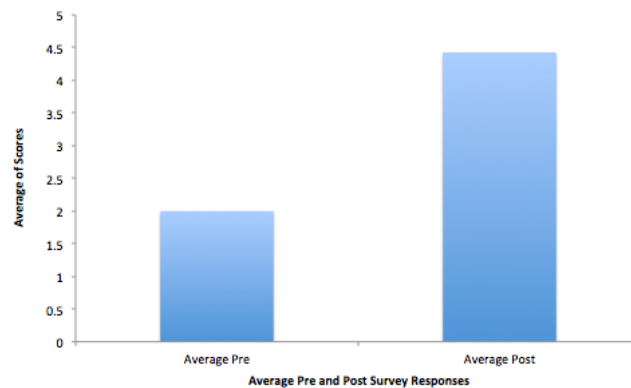


Figure 16. Average pre and post survey responses (Question #4).

Question #5. Rate the impact that the use of MI could have on increasing your job satisfaction.

The response options used the same Likert scale range from “not sure” (1) to “a lot” (5). Six participants responded “not sure” and one responded “a little” in the pre-intervention survey, and in the post-intervention survey, one participant responded “not sure”, three responded “a

good amount” and another three responded “ a lot” (Figure 17). The overall trend in Figure 17 shows that there was a large shift in people being unsure if MI could increase job satisfaction to believing that it could help. The average of responses increased from 1.28 pre-intervention to 4.28, post-intervention (Figure 18).

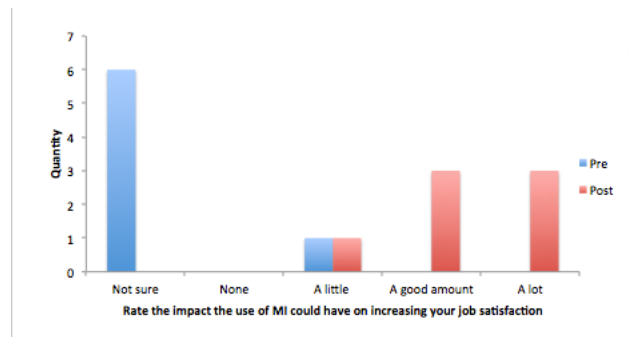


Figure 17. Question #5. Rate the impact that the use of MI could have on increasing your job satisfaction

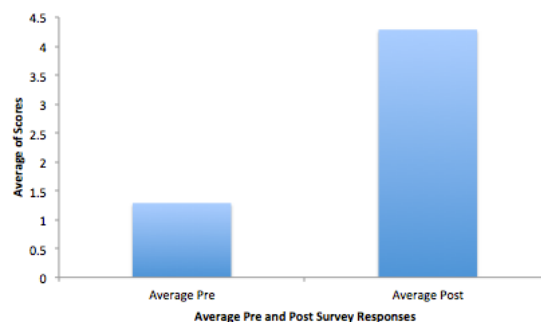


Figure 18. Average pre and post survey responses. (Question #5).

Question #6. Rate the impact that the use of MI could have on increasing your personal and career fulfillment.

The five Likert responses ranged from “not sure” (0) to “a lot” (5). Figure 19 shows that there were five individuals who responded "not sure", one response marked “a little”, and one response that was marked "a lot" prior to the intervention. Post-intervention, two individuals

marked the response "a little", another two marked “a good amount”, and three individuals marked “a lot”. The overall trend shifted from most individuals being unsure about the impact that MI could have on increasing career fulfillment, to believing that it could help a good amount. On average, the intervention increased the survey responses from 1.85 to 4.14, shown in Figure 20.

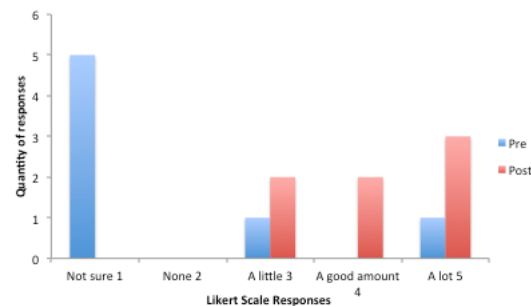


Figure 19. Question #6. Rate the impact that the use of MI could have on increasing your personal and career fulfillment

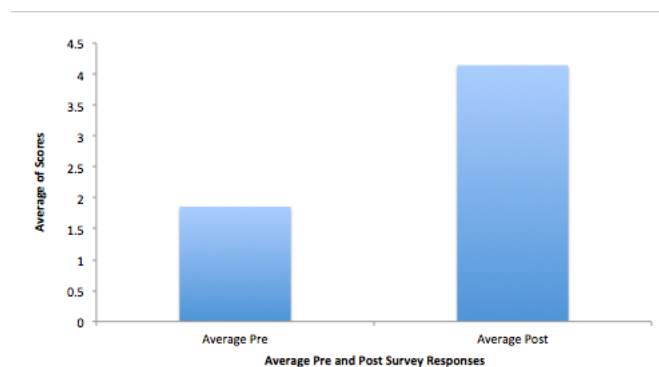


Figure 20. Average of pre and post survey responses (Question #6).

Two-week post intervention free response survey. Two weeks following the intervention, another survey was given out to the participants. This survey encouraged the participants to give specific examples as to how MI has helped them achieve something with a patient, how it has made them feel like they made an impact in the patient's visit or how they

thought it helped improve the patient's experience at the visit. There were a total of three yes/no responses and one open ended response. Only four of seven participants submitted the two-week post intervention free response survey. All of the participants stated that since the completion of the MI modules and the interactive seminar, they try to use MI daily (Question 1). All of the participants also answered yes to the second question, which asked if the use of MI has helped increase the quality of patient experiences. The third question also had four “yes” responses, asking if using MI has helped the employee feel like they were able to make a greater impact on the patients' experience in the visit (rather than not using MI). All four employees also responded to the open-ended question asking how MI has helped them make a positive impact on a patient's visit. The questions and responses are shown in Table. 5.

Table 6.

Two-week post intervention open response survey

	“Yes”	“No”	Comments:
Following your completion of the MI training, do you try to use MI at work daily?	4	0	I try to use it as much as possible, when I can.
If you try to use MI at work, do you think it has helped increase the quality of patient experiences?	4	0	
When you use MI, do you feel you have made more of a positive impact on the patient's experience (as compared to not using MI)?	4	0	When I try to be more accepting, I am more patient with the patients I talk to
Please give a specific example on how using MI has helped you feel like you were able to help the patient	n/a	n/a	<ul style="list-style-type: none"> Patients feel more like their opinions matter, because we try to understand their point of view. When they talk more, I also have a better understanding of how the patient feels and this allows us to connect

better with the patient.

- When Scheduling, instead of stating there are no appointments available on the days they specify, I try to offer them more options to help them have an easier time making an appointment
 - I try to use more open-ended questions to get the patient to talk more. When they talk more, they open up and this lets me know how the patient is feeling. When we ask them open-ended questions, they talk a lot more and seem to enjoy talking.
 - I try to be more sympathetic and use a different voice tone, and this helped me calm down a grumpy patient
-

Summary

Out of the 15 potential participants, seven participants participated in the pre-intervention survey; the same seven participants completed the computer modules, participated in the interactive seminar and submitted the post-intervention survey. Of these seven participants, only four participants filled out and submitted the two-week post intervention survey. Following the DNP intervention, there was an overall increase in the understanding of MI, understanding its use in clinical implications and also an increase in the use of MI among the seven participants. With the clinical implications that MI has, there were increases in post-intervention scores in the belief that MI will increase the quality of patient experiences, patient rapport, job satisfaction and career fulfillment. In addition to the results, the overall increase of use in MI has shown that there has been an acceptance of adopting the use of MI into daily practice. Going back to the operational definitions, there was an increase in how participants valued MI, and also an increase in MI usage. A little teaching can go a long way, and with the implementation of this

intervention, a little bit of employee education on MI can collectively impact the population of patients that receive care at this clinic.

Chapter 5. Discussion

Evolution of the Project

The project evolved in many ways, and changed in terms of the timeline, staff trained, the intervention itself, and the post intervention assessment time frame. Prior to the implementation, there was a planned timeline to the project, and a predicted participation of staff members, but as observed through previous research on translational science, the expected and actual outcomes of the project rarely ever perfectly match up. The following section will discuss the expected and actual outcomes to the project, and also the barriers and facilitators to implementation.

Expected versus actual outcomes. Table 5 shows the expected and actual outcomes for several aspects of this project. There were some events that required changes to be made to the intervention section of the timeline, which changed the timeline of the data collection. Some other changes that occurred during the project included the participation of the sample, which led to some minor changes/omissions to the intervention. The anticipated sample size was larger than the actual sample size. Initially, all of the clinic staff were willing to participate, but as time went on, staff members dropped out due to their schedules being too busy, not having enough time to complete the MI computer modules, they were on vacation or weren't scheduled to work on the day of the MI interactive seminar.

Table 7.

Expected vs. Actual Project Outcomes

	Expected	Actual
Timeline	<ul style="list-style-type: none">• Implementation planned for December 8, 2017.	<ul style="list-style-type: none">• Implementation on January 11, 2018.

Sample	<ul style="list-style-type: none"> • All staff at the clinic will be trained (Physicians (5), RN (1), MA (5), and PSRs (4) during a clinic staff meeting. 	<ul style="list-style-type: none"> • Staff trained included: RN (1), MAs (2) and PSRs (4).
Intervention	<ul style="list-style-type: none"> • Specific patient scenarios were planned to match the job position of all employees in the clinic. 	<ul style="list-style-type: none"> • Patient scenarios that matched the job position of the RN, MAs and PSRs were used.

Facilitators and barriers.

Throughout the project, facilitators and barriers were identified, and included aspects of the timeline, sample, intervention and the data collection. The greatest barrier that affected the DNP project was the aspect of time. There were many time restraints that prevented the entire clinic staff to participate in the intervention, and there was also a large time restraint as to when the clinic staff could set aside synchronous “staff meeting” time for the intervention. The clinic has been going through many changes that required all of the clinic staff to complete work that was required outside of their regular clinic duties. This involved extra reading, learning new work processes, policies and procedures, attending seminars, and also completing annual company computer based training work modules and compliance and safety modules. It was initially verbally agreed that August would be a good time to start the intervention and release the self-paced MI computer learning modules, but the start month kept getting pushed back due to other quality improvement obligations that the clinic had to prioritize first. Overall, the staff showed interest and enthusiasm in learning about MI and the average trend of the results showed improvement in its use, and an increase in belief and understanding on how it could help increase both patient satisfaction, employee satisfaction and overall engagement.

Table 8.

Facilitators and barriers

	Facilitators	Barriers
Timeline	<ul style="list-style-type: none"> Stakeholder engagement greatly helped with pulling the project through the required timeframe. The continued support from the stakeholders ensured that the project was a priority, and not “put on the back burner.” 	<ul style="list-style-type: none"> Finding time when most of the clinic staff would be present at a staff meeting.
Sample	<ul style="list-style-type: none"> Stakeholders allowed time during the staff meetings for the change agent to introduce the DNP project and to hold the MI interactive seminar. 	<ul style="list-style-type: none"> Many employees were too busy to complete the MI modules on their own time, making them ineligible to attend the interactive seminar.
Intervention	<ul style="list-style-type: none"> There was much support from the stakeholders, content expert and the clinic management in seeing that the intervention was carried out. They also completed the MI computer modules and attended the interactive seminar in which they helped facilitate several of the groups through the patient encounter simulations. 	<ul style="list-style-type: none"> It took some time for the staff to catch on to the patient simulations and how MI could be worked into the patient encounter simulations. Only one interactive seminar was held, and patients may not be fully comfortable with MI, preventing them from using it with patients.
Data Collection	<ul style="list-style-type: none"> The change agent was present when Pre and Post intervention surveys were handed out, resulting in the participants turning them in right away. 	<ul style="list-style-type: none"> When the 2-week post intervention open-ended response type surveys were emailed to the staff, it took several email announcements to have them filled out and

DNP Essentials

The DNP essentials are curricular elements that are core essentials, and outline the foundational competencies necessary for all roles related to advanced practice nursing (American Association of Colleges of Nursing [AACN], 2006). These eight essentials have guided the project from its development, implementation and evaluation, and are listed in table 7. The objectives of this DNP project was aimed at providing Motivational Interviewing (MI) training to help employees become more engaged in their role of patient care, to increase patient engagement and satisfaction, while simultaneously increasing job satisfaction (for the employee). The objectives met DNP Essentials V, VI & VIII. The conceptual framework that was used to guide this practice change was the Iowa Model of Evidence Based Practice by Titler et al. (2006), and met DNP Essential I. Through the use of this model, several other DNP Essentials were met. The early stages of this model required the formation of a team, which required interprofessional collaboration with other health care professionals, administrators and other stakeholders (Essential VI). Together, the team was able to discuss the anticipated changes that the organization will go through with the changing healthcare quality standards and insurance reimbursement criteria, and from there, we were able to select a topic/area to address (Essentials II & V). Evidence retrieval was done through the use of electronic databases, and Melnyk & Fineout-Overholt's (2011) hierarchal-based grading systems used were to critique, grade and synthesize the body of literature (Essentials III & VII). With the guidance of the literature findings and the criterion of organizational and policy arenas, an evidence based practice recommendation was developed, implemented and evaluated (Essentials II, III, IV & V). The

findings of the intervention, as well as the new knowledge that was obtained from the translation, application and integration process was disseminated to the organization, and will be used to meet eligibility requirements for additional quality improvement grants (Essential IV & V).

Table 9.

Implications and Recommendations Based on The Essentials of Doctoral Education for Advanced Nursing Practice

DNP Essentials	Implications & Recommendations
ESSENTIAL I: Scientific Underpinnings for Practice	<ul style="list-style-type: none"> • Used the Iowa model of Evidence Based Practice Change by Titler et al. (2006) to guide the practice change. • Knowledge gained from the literature synthesis was translated via the use of nursing theory to be utilized in a practice environment.
ESSENTIAL II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking	<ul style="list-style-type: none"> • Promoted quality improvement changes via educational enrichment throughout a primary care practice setting using leadership skills and organizational stakeholder engagement and agreement. • Created a practice-level implementation that addresses national healthcare quality standard benchmarks. • Worked within the criterion of organizational and policy arenas to create a sustainable and cost effective intervention to address strategies to improve patient care while improving job satisfaction simultaneously.
ESSENTIAL III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice	<ul style="list-style-type: none"> • Hierarchal evidence based grading systems used to critique, grade and synthesize the body of literature. • Translated, applied and integrated evidence based knowledge into nursing practice to address a clinical problem. • Disseminated new knowledge obtained from the translation, application and integration process of

	evidence-based knowledge into nursing practice.
ESSENTIAL IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care	<ul style="list-style-type: none"> • Electronic literature review conducted using various databases such as Google Scholar, CINAHL and PubMed. • Utilized a web-based, self-paced learning module to assist with staff enrichment. • Disseminated project conclusions and findings through electronic mail to the clinic staff, content experts, committee members and organizational stakeholders.
ESSENTIAL V: Health Care Policy for Advocacy in Health Care	<ul style="list-style-type: none"> • Analyzed third party reimbursement policies and national healthcare quality standards such as Cozeva, Comprehensive primary care plus (CPC+), and Healthcare Effectiveness Data and Information Set (HEDIS) to shape the practice change that was implemented. • Implementation aimed at influencing and teaching staff members how they can become more engaged in their role of patient care
ESSENTIAL VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes	<ul style="list-style-type: none"> • Collaboration with other health care team members in administrative roles to advocate for a staff educational intervention to improve employee engagement and patient satisfaction. • Worked with other healthcare professionals such as PSCs, MAs, RN and clinic management staff to learn about MI and how it can be used to improve employee engagement and patient satisfaction.
ESSENTIAL VII: Clinical Prevention and Population Health for Improving the Nation's Health	<ul style="list-style-type: none"> • Evidence shows MI has the potential to improve patient biometrics, collectively enhance population health, and has been effective in helping patients talk about making behavioral changes- Per evidence based recommendations staff were given brief educational interventions to learn how to apply MI into their daily patient care routines. • The DNP candidate pushed for and carried out an educational intervention to give employees EBP tools to further help promotion of health and disease

prevention

ESSENTIAL VIII:
Advanced Nursing
Practice

- Designed, implemented and evaluated an educational intervention to equip clinic staff with additional skills to promote optimal care.
 - Educated and guided a health care team to meet the evolving needs of national quality benchmarks and third party reimbursement quality requirements.
-

Dissemination

A summary and analysis of the findings was presented as a paper packet and an electronic PDF document. The summary and analysis was distributed to the clinic administrators, participants and stakeholders that included the Medical Director of the Ambulatory Clinics, the Ambulatory Clinic Administrator, the Clinic Manager, the Director of Ambulatory Programs, and the Queens Clinically Integrated Physician Network Administrator. The summary portion briefly described the DNP project and the materials used to train the staff. The results section of the packet included results of the intervention and its implications for future expansion.

A full report will be handed in to the DNP project team, and will be submitted to the University of Hawaii at Manoa's Doctor of Nursing Program (DNP program) to fulfill a graduation requirement. A final project presentation was presented, as a public oral defense on March 12 from 12pm to 2 pm. Consideration will be given to submit a manuscript for publication in an appropriate journal.

Future Expansion

The same materials and implementation design may be used within other patient care settings among RNs, PSRs, and MAs. Potentially, this implementation can be expanded to all other Queens Health Care Centers ambulatory clinics. All healthcare workers are able to take the

online learning modules, although new patient simulations must be created for physicians, Nursing assistants, physical therapist and any other health care team member other than a RN, PSR or MA, since those positions previously have patient simulations from the DNP project implementation. The results of the DNP project will also be used to apply for further quality improvement fund granting, from both the state and federal levels.

The stakeholders will use the practice change results to bridge the knowledge gained by the employees to other quality improvement implementations such as mental health integration into primary care using SBRIT. SBRIT is an acronym that stands for Screening, Brief Intervention, and Referral to Treatment, which is an evidence-based practice that is used to identify substance abusers to prevent or reduce dependency or use of alcohol or illicit drugs.

If not all, some of the intervention components can be used to implement other system wide MI teaching interventions. MI is gaining an increasing popularity throughout the organization, and learning MI was one of the requirements for the Emergency Department's (ED) newly earned Level I Trauma Certification. The use of patient simulations to allow ED staff to practice MI was not used, and are highly supported and recommended from the project stakeholders for further MI teaching interventions.

Conclusion

Translational science is the bridge that joins evidence with clinical practice (Pearson, Jordan, & Munn, 2011). The translation of knowledge and evidence into practice is complex, evolving and dynamic, making this a difficult and challenging process (Pearson et al., 2011). This chapter discussed the evolution of the project, the theoretical outcomes versus actual outcomes, the barriers and facilitators to this project, the DNP essentials and future implications for the project. MI is something that can be easily learned and applied, and can go a long way in

improving population health. Consistent with previous research done, MI can be easily taught and learned through brief interventions. A little teaching can go a long way, and a brief intervention of employee education on MI can collectively have a positive impact on the population of patients who receive care at this clinic. A summary of the findings was disseminated to the organizational stakeholders, and will be used to qualify the organization for further quality improvement funding grants. The materials and methods used to carry out this intervention can be applied to similar primary care centers within the organization.

Appendix A. Seminar Outline & Module Summary

Motivational Interviewing Interactive Seminar

Module Summary

What is Motivational Interviewing (MI)?

- MI is a patient centered communication approach to help the patient discover intrinsic motivational factors to make a change.
- MI is about a partnership rather than having one person be the expert and the other just the recipient. The individual in the helping role respects the other individual's autonomy and freedom of choice regarding their lifestyle choices and behavior.
- MI is conducted by working with rather than at the patient... it's like dancing, not wrestling... -Michael Goldstein M.D.

Core concepts of MI

- Avoiding the "righting reflex"
- MI guides the patient to make their own decisions about making a change (middle ground between directing the conversation and following the conversation)

"Spirit of MI" Based on 4 key elements

- Collaboration between the patient and health care worker. MI focuses on being a partnership rather than assuming the "expert role"
- Evoking or drawing out motivation to change rather than imposing ideas
- Accepting the patient and not looking down on them for their decisions
- Showing compassion towards the patient by actively seeking to understand the patient's experiences, values, and motivations.

OARS- The foundation of MI's unique communication style

- O=open ended questions
- A= affirmations
- R= reflective listening
- S= summarizations

Queens Health Care Center of Hawaii Kai

January 11, 2018

3 pm- 4:30 pm

Overview

Over the past few months, we completed online learning modules to help us learn about Motivational Interviewing (MI). Today, we will practice executing what we learned in those online modules via patient encounter simulations.

Objectives

- Become more familiar with MI, understand its importance and its practical implications
- Demonstrate and practice MI techniques
 - "Spirit of MI"
 - OARS
- Recognize the barriers that prevent us from using MI

Activities

We will break up into pods of 3's, and each person will take turns being the patient, the interviewer and the evaluator. The interviewer and patient will have a total of 3 minutes to run through a simulation that will be provided, and following this, the patient, interviewer and the evaluator will have two minutes to evaluate the positive points of the simulation, and also discuss the things that could be improved.

Evaluation

Please fill out the evaluations that are attached to this document. Thank you for your time!

Appendix B. Registered Nurse Simulation

Motivational Interviewing Interactive Seminar

Registered Nurse Simulation

1 Today's case...

A 56-year-old male with hypertension is here in the clinic today. He has been a patient of yours for 4 years, and all the times he came in was because his wife forced him to get a checkup. At the last visit, you discussed diet and exercise, and at this appointment, there have been no changes to his weight, blood pressure and A1C.

2 Practice...

Practice using the "spirit" of MI and OARS to help Paul identify a change he wants to make.

3 The scenario begins as Paul states...

"Yeah, yeah. I know my numbers didn't improve from the last time I came in here, and it doesn't help me feel better that my wife keeps nagging me about my health. What's the big deal?! I mean, I am a little overweight, but I feel just fine!

As the RN, you can reply...

Hi Paul. Thank you for agreeing to see us today. It seems like your wife is concerned about your health. What would you like to talk about at your visit today?

Page 3 has a dialogue example. You can let the dialogue guide the simulation, or you can make up your own dialogue as you continue the patient encounter!

Continued on page 2

Open Ended Questions

- In what ways does your high blood pressure concern you?
- What are you struggling with when it comes to managing your health?
- What would work for you?
- What comes to mind when you think about making this change?
- What are some of the good things that come to mind about making this change?
- What other options do you have?
- What would be some of the difficulties you may have when trying to come in for a regular check up?
- How important is it to you to work on becoming well and healthy?
- How would becoming sick affect you?

Open Ended Questions (as opposed to closed ended questions), allows the patient to share more information about what they are going through.

Affirmations

- You coming in for this appointment really shows that you care about your wife who cares deeply for you.
- You are taking a step in the right direction
- I appreciate you opening up to me and talking to me about your concerns.

Affirmations are positive reinforcements or statements that deserve recognition. They help build self-confidence and encourage patients through the process of change.

Reflective Listening

- It sounds like...
- It seems like...
- It seems like you are a little worried about your health

Reflective listening is essential to building rapport, and involves repeating, rephrasing or paraphrasing and reflecting on feelings. Listen to the patient, reflect back on the patient's feelings, and remember to use statements instead of questions

Summarizations

- We talked about a lot today, and let's see if I heard you right... (Collect additional points from the conversation and reflect them into a statement)

Summarizations are helpful at transition points to ensure you are on track and is also done at the ending of the conversation

Putting it all together... A sample dialogue

It seems like your wife is worried about your health. What would you like to talk about today?

Bah, I don't want to talk about anything! I feel perfectly fine, and I just want my wife to quit nagging me to come in! Every day she tells me to check my blood pressure with her machine that she keeps by the couch, and tries to kill me by giving me tasteless food! "Too much salt no good," she tells me, and she tries to get me up to go walking with her every morning.

Okay, so you don't feel sick or anything, and you want your wife to stop getting on your case about diet and exercise.

Yeah. I don't see what all the fuss is with high blood pressure. My numbers are high, but I can still do everything on my own. I still exercise every day if I wanted to, and I'm not that overweight. She talks to me like I need to make these changes or I'm going to be disabled tomorrow!

It seems like you don't like it when your wife tells you what to do. Again, you are doing the right thing for yourself by coming in to see us today. Can you tell me what you understand about hypertension?

Hmmmm. Hypertension. It's when the blood pressure is too high and when you get older like me, I guess, it's hard for your heart to work against all that pressure, so it causes your heart to work harder than it should.

That is absolutely correct! With hypertension, we worry about your heart having to work extra to pump blood against all that pressure. What comes to mind when you think of these things?

Honestly, it makes me really scared about getting older. It overwhelms me thinking of all the foods I can't eat, the amount of weight I have to lose, and the amount of exercise I have to do.

Those are valid concerns that you have. I appreciate you opening up to me. Change can be scary, but we can work together on helping you get to where you want to be. What would be one of the first changes you want to make in helping yourself become healthier?

Well, I always wanted to take up ballroom dancing. It's not exactly a sport like running or basketball, but I think it is something that my wife would enjoy too. I'm not ready to give up all the good food yet.

Appendix C. Medical Assistant Simulation

Motivational Interviewing Interactive Seminar

Medical Assistant Simulation

1 Today's case...

Ms. B is a patient here for a follow up on her labs and a blood pressure check. She has been monitoring her blood sugar levels and blood pressure daily, since she is borderline hypertensive and diabetic. Ms. B is usually compliant with adhering to her treatment regimen, but ever since the holidays, she says she has been "cheating" a lot on his diet and skimping out on her daily exercise...

2 Practice...

Practice using the "spirit" of MI and OARS to talk to Ms. B about diet and exercise.

3 The scenario begins as Ms. B states...

"Happy new year! I'm here today to get my blood test results and to check my blood pressure. I'm afraid to see what the doctor will tell me about my health since I haven't been exercising much and eating too much good food over the holidays. I have been thinking of signing up for a gym membership again, but you know how it goes after the first month... I stop going!"

As the medical assistant, you can reply...

Happy New year Ms. B. Thank you for coming in to see us today! Let's start your visit with taking your vital signs. It seems as if you are concerned about your health. Can you tell me more about what worries you about your health?

Page 3 has a dialogue example. You can let the dialogue guide the simulation, or you can make up your own dialogue as you continue the patient encounter!

Continued on page 2

Open Ended Questions

- What worries you about your health?
- In what ways does your high blood pressure concern you?
- What are you struggling with when it comes to your diabetes?
- What would the advantages be of going to the gym every day for you?
- What comes to mind when you think about making this change and signing up for the gym?
- What are some of the good things that come to mind about making this change?
- What other options do you have?
- What would be some of the difficulties you may have when trying to go to the gym on a regular basis?
- How important is it to you to work on becoming well and healthy?
- How would becoming sick affect you?

Open Ended Questions (as opposed to closed ended questions), allows the patient to share more information about what

Affirmations

- You coming in for your appointment really shows that you are committed to becoming healthier.
- You are taking a step in the right direction
- I appreciate you opening up to me and talking to me about your concerns

Affirmations are positive reinforcements or statements that deserve recognition. They help build self-confidence and encourage patients through the process of change.

Reflective Listening

- It sounds like...
- It seems like...
- It seems like you are a little worried about your health

Reflective listening is essential to building rapport, and involves repeating, rephrasing or reflecting on feelings. Listen to the patient and reflect back on the patient's feelings. Remember to use statements instead of questions.

Summarizations

- **We talked about a lot today, and let's see if I heard you right... (Collect additional points from the conversation and reflect them onto a statement**

Summarizations are helpful at transition points to ensure you are on track, and is done at the ending of the conversation.

Putting it all together... A sample dialogue

It seems like you are worried about your health. What worries you about your health?

Well, before when my grandpa was overweight, he had a lot of trouble moving around and kept complaining that his knees and back always hurt him. He also said that he was always taking medicine for the pain. I don't want to have to take medication all the time and I definitely don't want to have a hard time moving around like he did.

So you don't want to have to take medications all the time and don't want to have a hard time moving around.

Yeah. I have been thinking about signing up for the gym again so I can lose the weight that I gained over the holiday. But you know how it goes. The last time I signed up for a gym membership I stopped going after a month or so. It ended up being a waste of money.

It sounds like you want to make a change in your life by signing up for the gym. What would be the advantages of going to the gym for you?

Well, I would lose the holiday weight I gained, and I would be in better shape to play soccer in the old folk's woman's league again. When I used to go the gym everyday before, I found that I would eat healthier too!

I can tell you have put a lot of thought into making a decision like this. What would be some of the difficulties you think you may have when you will try to go to the gym on a regular basis?

Well, the only difficulty for me would be that I wouldn't be able to take a nap when I get home from work. I guess the only thing I would need to stop doing is being lazy!

Considering signing up for the gym and wanting to eat healthy again is definitely a step in the right direction, and It seems like you are ready to get yourself back on track!

Appendix D. Patient Service Representative Simulation

Motivational Interviewing Interactive Seminar	
Patient Service Representative Simulation	
1 Today's case...	2 Practice...
A man, Mr. C has called to make an appointment to follow up on his high blood pressure. The last time he has been in the office was 2 years ago, which his wife and daughter had forced him to go. He has once again been forced by his wife and daughter to make an appointment to get checked out.	Practice using the "spirit" of MI and OARS to talk to Mr. C about his health and blood pressure
3 The scenario begins as Mr. C states...	
"Hello. My wife and daughter keep nagging me to make an appointment to see the doctor to get my blood pressure checked. They make it seem so urgent like I'm very sick and need medical attention, but honestly, I feel fine. Do you think I need to make an appointment even if I don't feel sick? I just really want them to stop nagging me."	
As the PSR, you can reply...	
Hi Mr. C. Thank you for calling today. It seems like your wife and daughter are worried about your health. When it comes to your health, what concerns do you have?	
Page 3 has a dialogue example. You can let the dialogue guide the simulation, or you can make up your own dialogue as you continue the patient encounter!	

Continued on page 2

Open Ended Questions

- In what ways does your high blood pressure concern you?
- What are you struggling with when it comes to managing your health?
- What would the advantages be for you if you got your health checked out regularly?
- What comes to mind when you think about making this change?
- What are some of the good things that come to mind about making this change?
- What other options do you have?
- What would be some of the difficulties you may have when trying to come in for a regular check up?
- How important is it to you to work on becoming well and healthy?
- How would becoming sick affect you?

Open Ended Questions (as opposed to closed ended questions), allows the patient to share more information about what they are going through.

Affirmations

- You calling to schedule an appointment really shows that you are committed to becoming healthier.
- You are taking a step in the right direction
- I appreciate you opening up to me and talking to me about your concerns.

Affirmations are positive reinforcements or statements that deserve recognition. They help build self-confidence and encourage patients through the process of change.

Reflective Listening

- It sounds like...
- It seems like...
- It seems like you are a little worried about your health

Reflective listening is essential to building rapport, and involves repeating, rephrasing or paraphrasing and reflecting on feelings. Listen to the patient, reflect back on the patient's feelings, and remember to use statements instead of questions

Summarizations

- We talked about a lot today, and let's see if I heard you right... (Collect additional points from the conversation and reflect them into a statement)

Summarizations are helpful at transition points to ensure you are on track and is also done at the ending of the conversation

Putting it all together... A sample dialogue

It seems like your wife and daughter are worried about your health. What worries you about your health?

Well, my mother-in-law had hypertension and spent several days in the hospital this Christmas because she had a stroke. Luckily it wasn't a bad one, and she didn't suffer any functional losses. She is still able to do everything she wants. She got really lucky. As for my health, I'm not worried about my health because I feel fine.

Okay, so you don't feel sick right now and feel fine. If you did become sick, how would this affect you?

Yeah. I don't see what all the fuss is with high blood pressure. My numbers are high, but I can still do everything on my own. I still exercise every day, and I'm not that overweight. If I did become sick, I guess I would have a lot to lose. I am teaching my daughter how to swim, and she is becoming really good at it. She even thinks she can make the varsity swim team as a freshman! We go to the pool every time to practice our swim strokes. I can't imagine how sad she would be to have to see me sick, and she would really miss out on all that practice time and coaching. Do you really think I need to come in to see the doctor?

Wow! You must be really good at swimming! Your daughter is lucky to have you as a coach, and it seems like she likes spending time with you. Well, looking at the computer, it is showing me that the last time you came in was 2 years ago.

Yeah, I guess I should come in. 2 years does seem like a long time, and its about time I start looking after my health. I'll be 50 this year and definitely don't feel like I'm 25 anymore. I guess I could lose a few pounds here or there, and I suppose I should take this high blood pressure thing more seriously.

Well, Mr. C, you calling to make an appointment does show your commitment to becoming healthier. Our next opening is next week Thursday. That's great that you are thinking about making a change.

Great! Thursday works for me.

Okay, I will put you down for next Thursday. Thank you for calling, and I appreciate you opening up and talking to me about your concerns.

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